SANYO

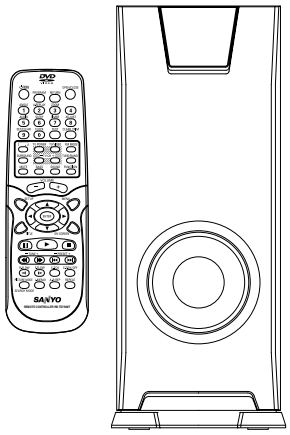
FISHER®

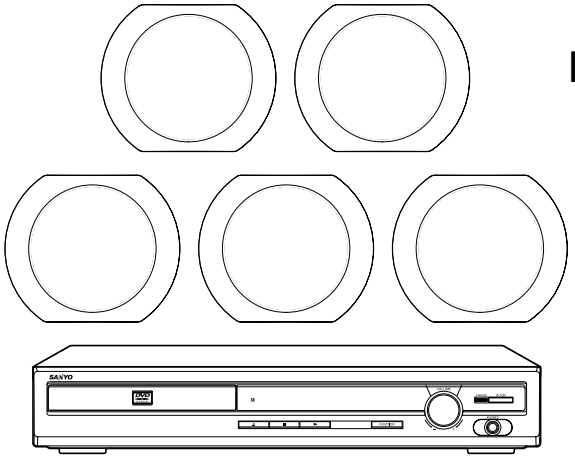
FILE NO.

Service Manual

DVD Home Theater System with 6 speaker

DCS-TS750 (US)
DC-TS750 (XE) (UK) (CA)
DC-TS730 (CA)





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129 636 00 TS750(US)
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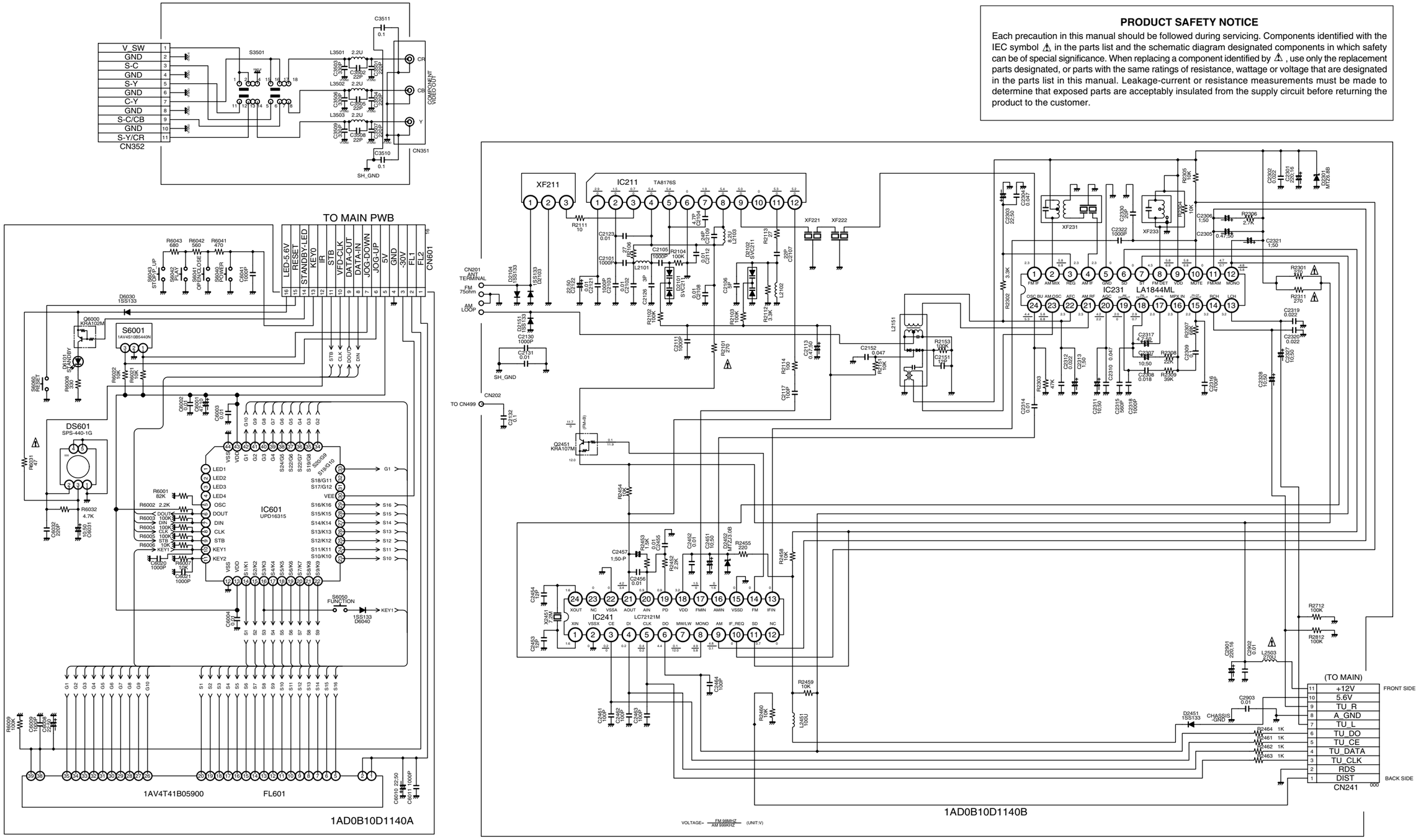
REFERENCE No. SM5810278

SCHEMATIC DIAGRAM (FRONT , TUNER for US,CA)

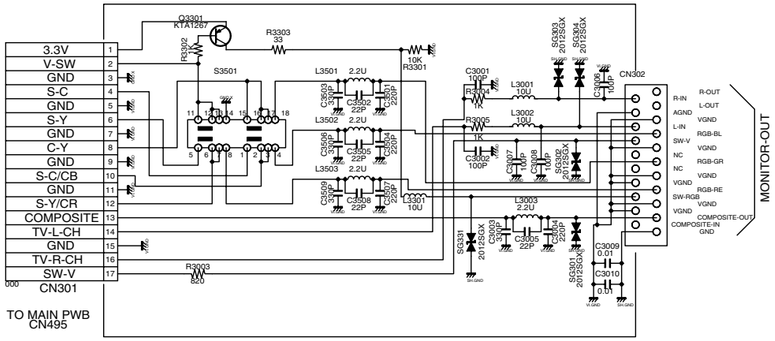
PRODUCT SAFETY NOTICE

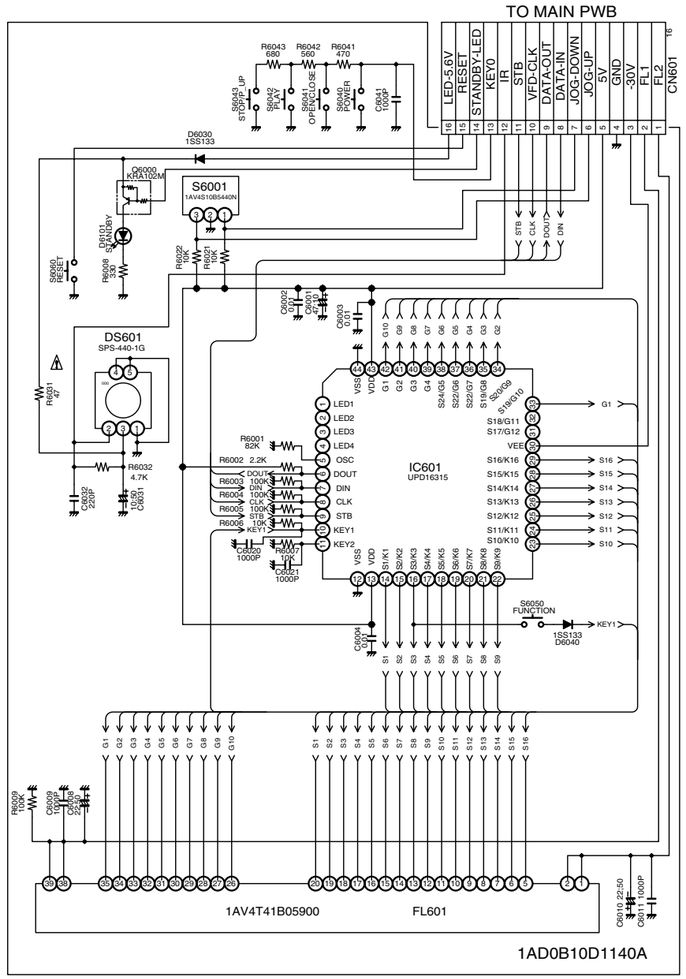
Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designated components in which safety can be of special significance. When replacing a component identified by ⚠ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

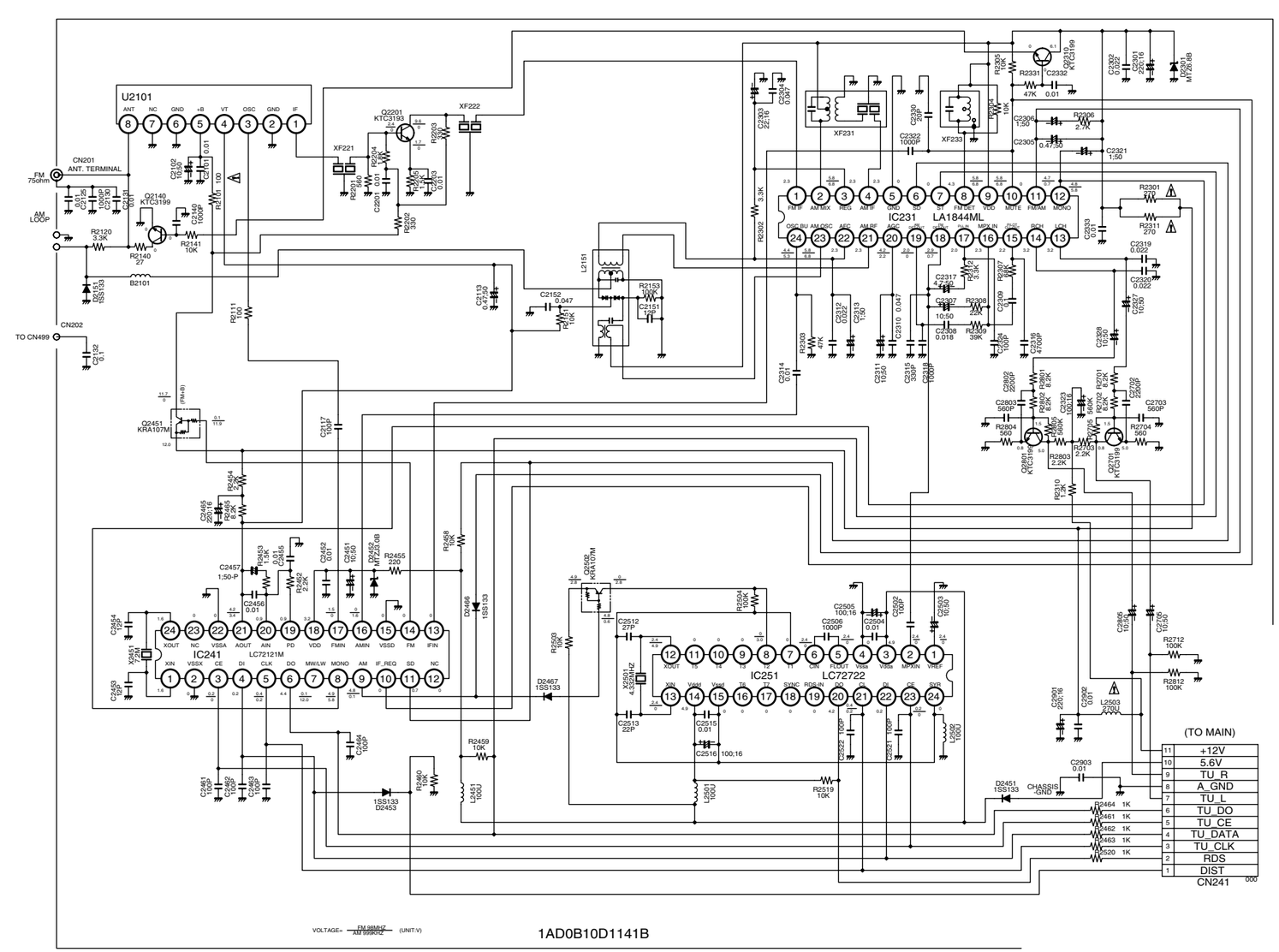


This is a basic schematic diagram.

SCHEMATIC DIAGRAM (FRONT , TUNER for UK,XE)







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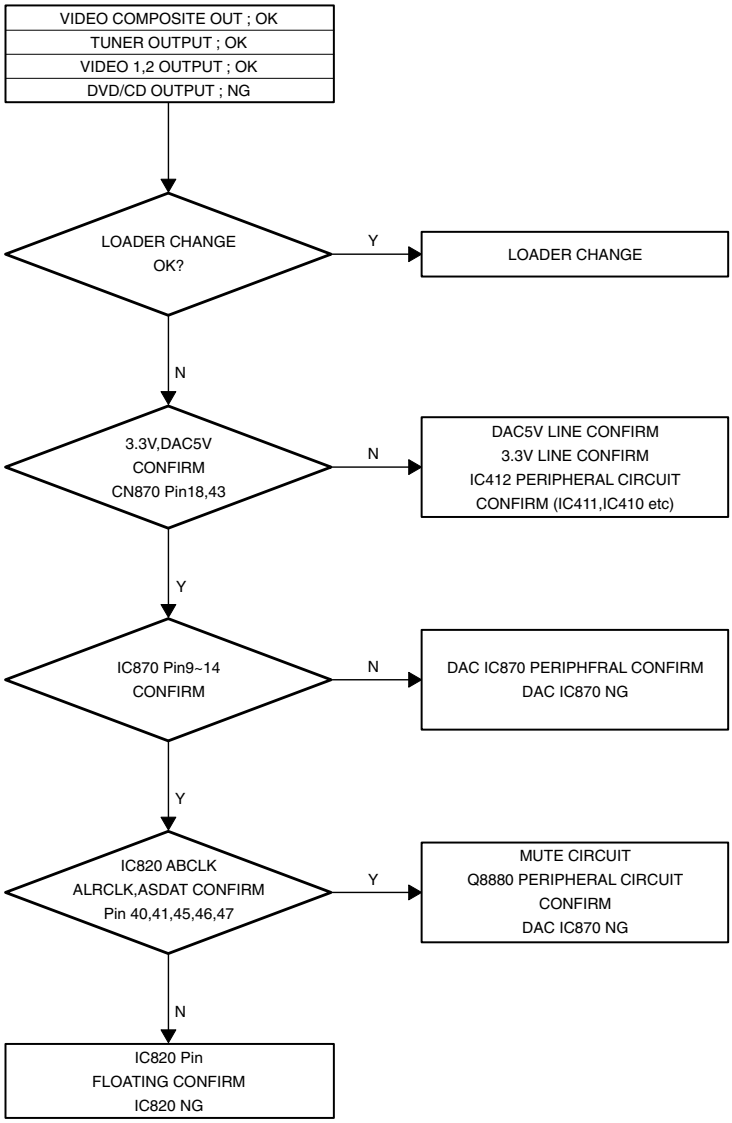
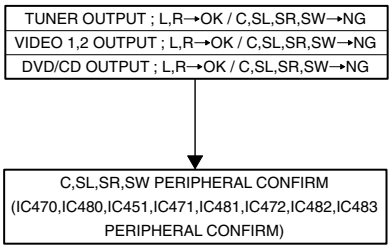
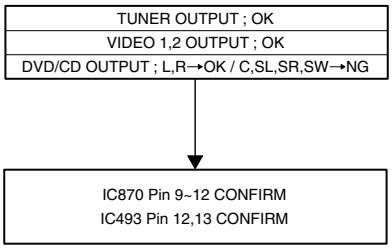
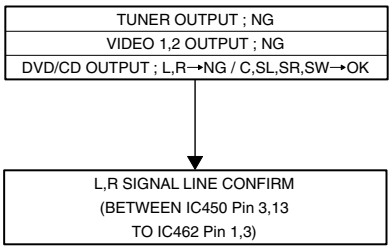
This is a basic schematic diagram.

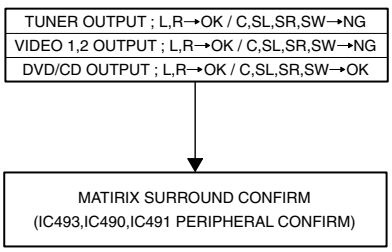
TROUBLE SHOOTING





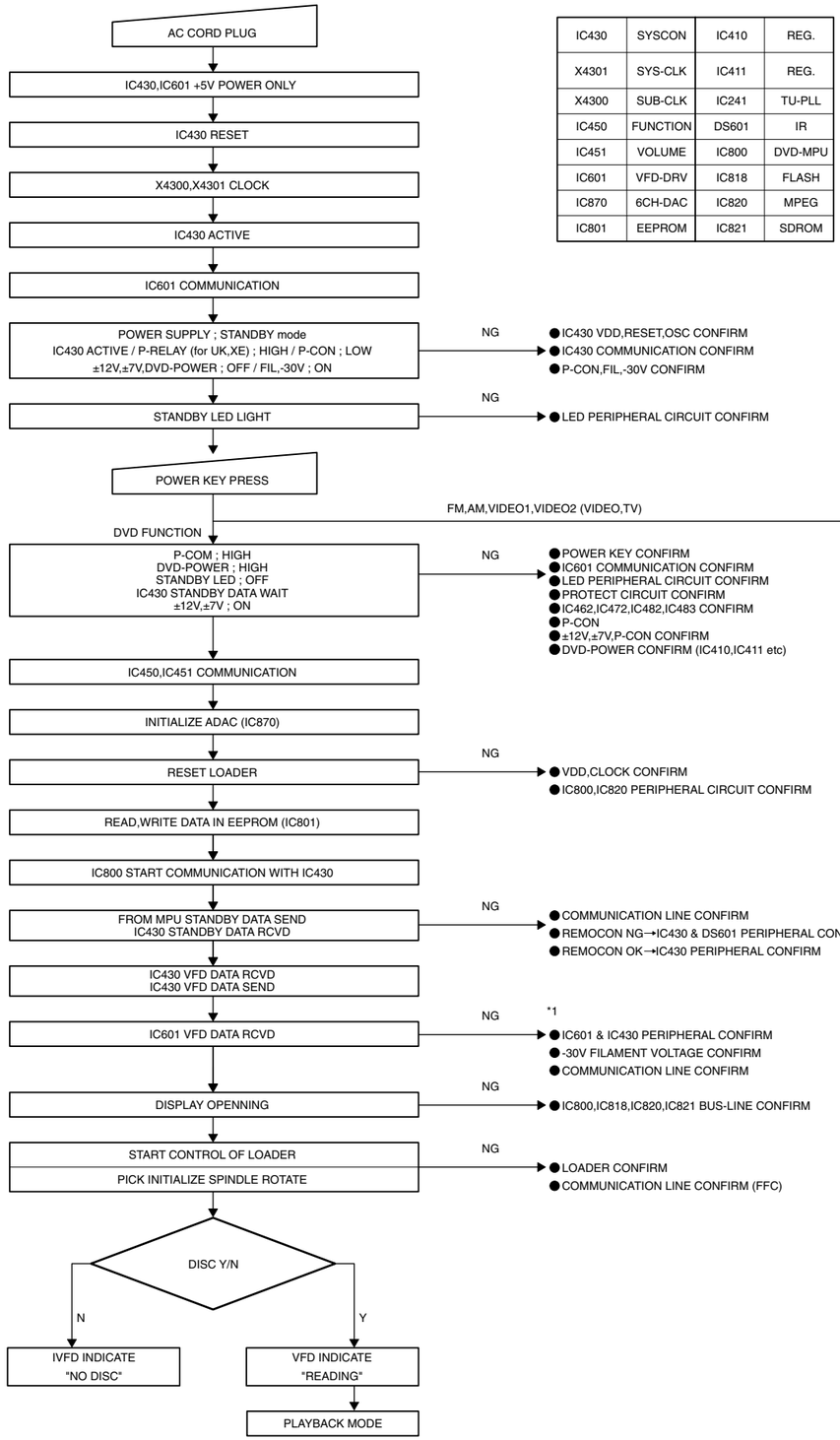


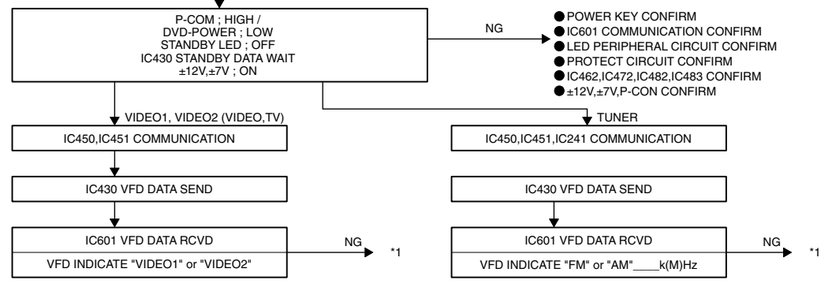




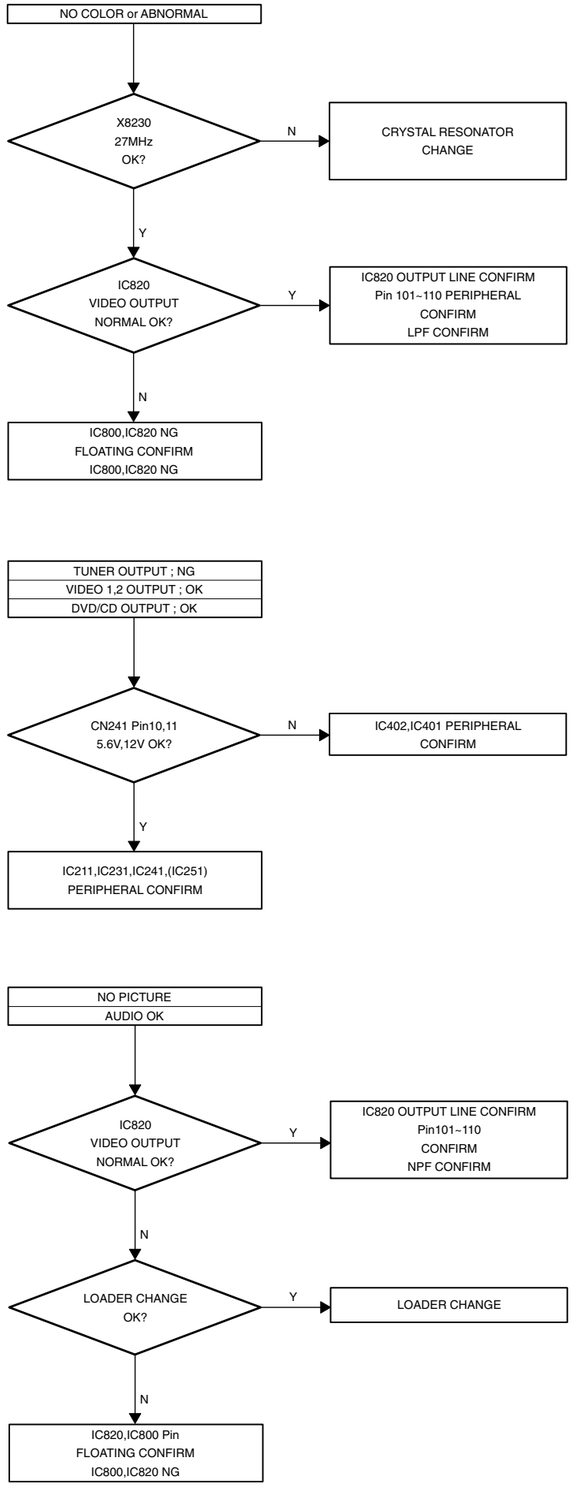
TROUBLE SHOOTING

IC430	SYSCON	IC410	REG.
X4301	SYS-CLK	IC411	REG.
X4300	SUB-CLK	IC241	TU-PLL
IC450	FUNCTION	DS601	IR
IC451	VOLUME	IC800	DVD-MPU
IC601	VFD-DRV	IC818	FLASH
IC870	6CH-DAC	IC820	MPEG
IC801	EEPROM	IC821	SDROM





TROUBLE SHOOTING



SERVICE MODE

A. Market / Region SETUP

In the initial condition for this model, Market and Region information are undefined.
In the following cases, be sure to set up Market/Region.
1. When updating the system using CD-R
   (Part code : 0PRADC9635--A).
2. When replacing a DVD substrate.

While Market/Region information are undefined, the message "Region Undefined" is displayed on the screen.

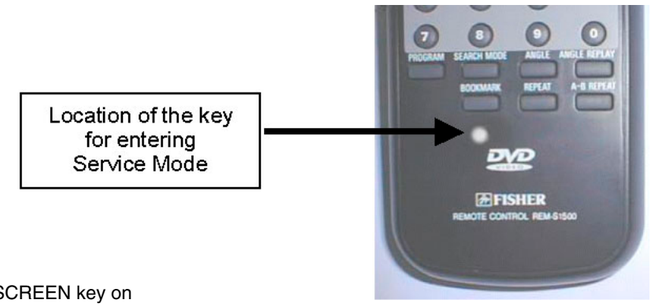
NOTE: Even if the condition is not under 1 or 2 above, if the message "Region Undefined" is displayed, be sure to set up Market/Region.

Message under the Market/Region undefine condition

B. How to enter Service Mode.

You can enter Service Mode in any one of the following ways (1 to 3).

1. Pushing the covered key located beneath Book Mark key on RB-1500 or REM-S1500.



2. Simultaneously pushing both Shift key and ON SCREEN key on REM-TS750MT(US),RB-TS750MT(CA) or RB-TS750ST(UK,XE).

C. Setup Procedures

1. Displaying SERVICE MODE screen

Display Service Mode screen following the instructions "How to enter Service Mode" above.

Service Mode screen

2. Displaying Internal Setup screen

Push NEXT button within three seconds after operating the Service Mode display.

On the Internal Setup screen shown on the right, set up Market and Region.

Model	Market	Region
DCS-TS750/US	SFC	1
DC-TS750/XE	EUR	2
DC-TS750/UK	EUR	2
DC-TS750/CA	S18	1
DC-TS730/CA	S18	1

Market/Rejion setup table.

Internal Setup screen

3. Setting Market code

3.1. While a highlighted indicator is displayed on the right side of the Market denotation, push ENT button on the remote controller. With each push the indicator will advance as shown below.

WM -> SFC -> EUR -> S18 -> SS -> PA- - -

3.2. Specify the code of the model in accordance with the Market/ Region Setup Table above.
(In DWM-380 model, the code is the same as the initial one "WM". Advance to the next procedure without making any changes.)

3.3 Once the desired code is displayed, push ▼ button to move the highlighted indicator to the Region input area.

Setting Market code

SERVICE MODE

4. Setting REGION code

4.1 While a highlighted indicator is displayed on the right side of the Region denotation, push ENT button on the remote controller. With each push the indicator will advance as shown below.

1 -> 2 -> 3 -> 4 -> 5 -> 6

4.2 Specify the number of the model in accordance with the Market/Region Setup Table above.
(In DWM-380/US models, the number is the same as the initial one "1". Advance to the next procedure without making any changes.)

4.3 Once the desired number is displayed, push ▼ button to move the highlighted indicator to Exit area.

Setting Region number

5. Saving settings

5.1 Make sure that the Market and Region settings are properly set.
(If any of the settings are incorrect, you can make a change by moving the indicator using p button, and following procedures 3 and 4 above.)

5.2 After ensuring that the settings are all correct, push ENT button while the indicator is on Exit area. The settings are now saved.

Saving settings

6. Finishing settings

6.1 After a few seconds, the Internal Setup screen disappears, and then the Service Mode screen is displayed again for three seconds as shown on the right.

You should check the settings.

Backend version S 11225 A 0

Brand (S : SANYO , F : FISHER)
Version (2 0 0 1 , 12 , 25)
Sub Version (A,B,.....Z)
Region (0 : Region undefined
1 ~ 6 : Region defined
F : Region Free)

Service Mode screen after settings

6.2 Power OFF.

SERVICE MODE

D. IMPORTANT NOTE

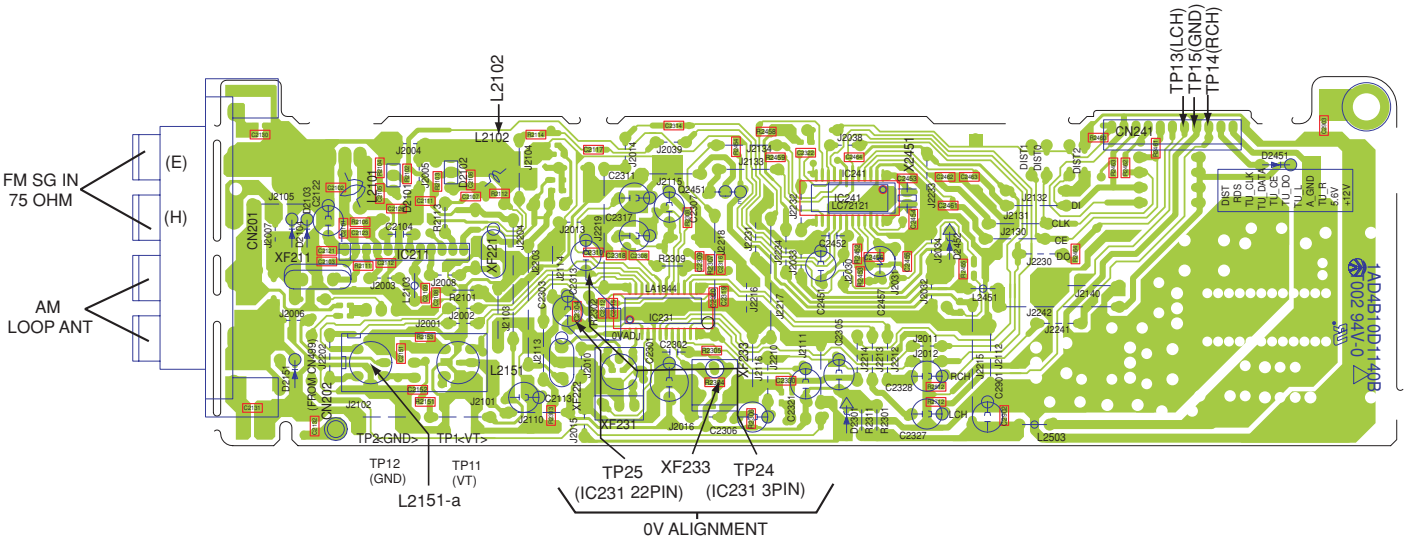
1. Once the "Market/Region" settings are written into EEPROM (IC801) on the DVD substrate, they cannot be reset.
   (However, updating the system using CD-R enables you to make new settings.)
2. While the Internal Setup screen is displayed, pushing the Power button enables you to terminate the operations without making any settings.

HOW TO LOAD SOFTWARE FOR MPEG P.W.BOARD

1. Power on, then open tray.
2. It take on CD-ROM for UPDATE software to the tray, and tray close.
3. Display " UP DATE" in the TV screen.
4. For the time being, tray open and FL display remain "UP DATE".
5. When software loading finished, FL display "STANDBY".
6. Next, set up market code and region code by "SERVICE MODE"
   CD-ROM part code is "0PRADC9635--A".

TUNER ADJUSTMENTS(US,CA)

- Use a plastic screw driver for adjustments.
- MODE : STEREO
- Speaker impedance : 8 Ω
- TUNING
  FM : 87.9MHz - 107.9MHz(200kHz step)
  AM : 520kHz - 1710kHz(10kHz step)



SG RF Level : 75Ω open Voltage dBμV
Antenna : 75Ω unbalanced Direct, Modulation : 1 kHz
Dev. : ±22.5kHz(MONO) ±22.5kHz(STEREO) ±6.75kHz(PILOT)
Output Level : about 100mV at TP13,TP14,TP15

1.FM

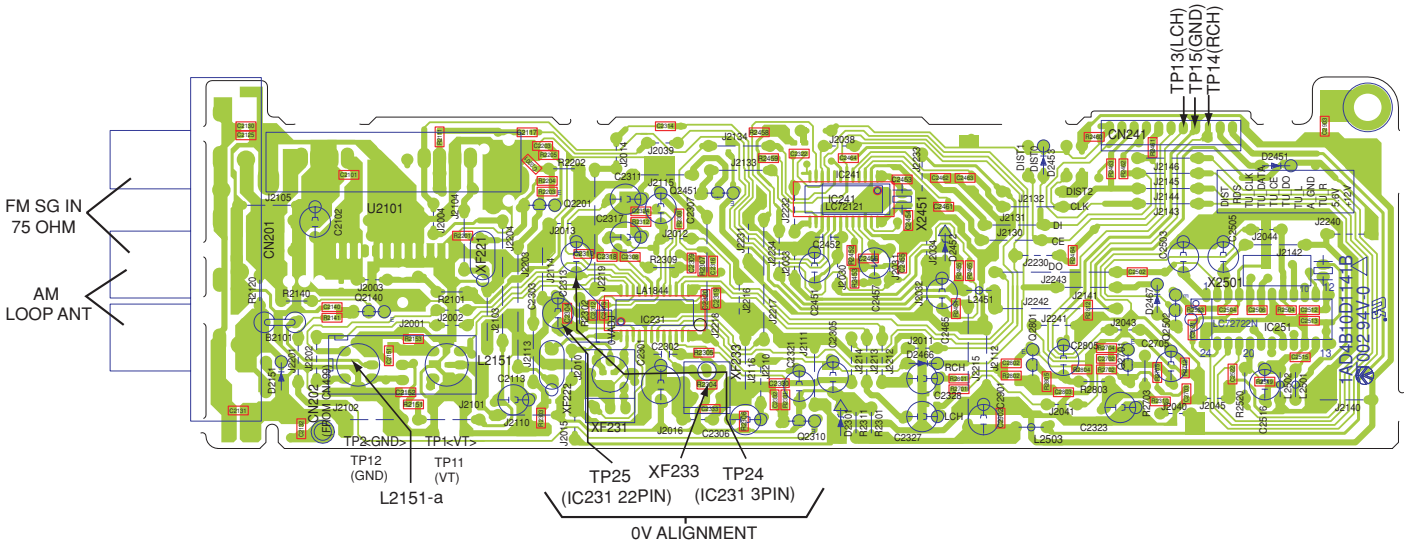
Step	Adjusting Circuit	Connection		SG Frequency	Set Position	Adjustment	Remark
		Input	Output				
1	IF Alignment	FM ANT. SG=66dBμV	IC231 3,22pin TP24, TP25	98.1MHz	---	XF233	0.0 ± 0.05V
2	Cover voltage	---	Connect Digital DC voltmeter to TP11(H), TP12(E).	87.9MHz	Low	L2102	Alignment voltage of 87.9MHz is 1.1 ± 0.1V.
		---		107.9MHz	High		Confirm voltage of 107.9MHz is <9.0V.
3	Tracking	Connect FM SG to FM Antenna (SG=8dBμV)	Connect to VTVM TP13(L) or TP14(R), TP15(E)	90.1MHz	Low	L2101	Max.
				106.1MHz	High		

2.AM

Step	Adjusting Circuit	Connection		SG Frequency	Set Position	Adjustment	Remark
		Input	Output				
1	Cover voltage	---	Connect Digital DC voltmeter toTP11(H), TP12(E).	520kHz	Low	---	more than 0.8V
		---		1710 kHz	High	---	less than 9.0V
2	Tracking	Connect AM SG to Test loop Ant.(SG=80dBμV)	Connect to VTVM TP13(L) or TP14(R), TP15(E).	600kHz	Low	L2151-a	Max.
				1400kHz	High		

TUNER ADJUSTMENTS(UK,XE)

- Use a plastic screw driver for adjustments.
- MODE : STEREO
- Speaker impedance : 8 Ω
- TUNING
  FM : 87.5 - 108.0MHz (50kHz step)
  AM : 522kHz - 1611kHz (9kHz step)



SG RF Level : 75Ω open Voltage dBμV
Antenna : 75Ω unbalanced Direct, Modulation : 1 kHz
Dev. : ±22.5kHz(MONO) ±22.5kHz(STEREO) ±6.75kHz(PILOT)
Output Level : about 200mV at TP13,TP14,TP15

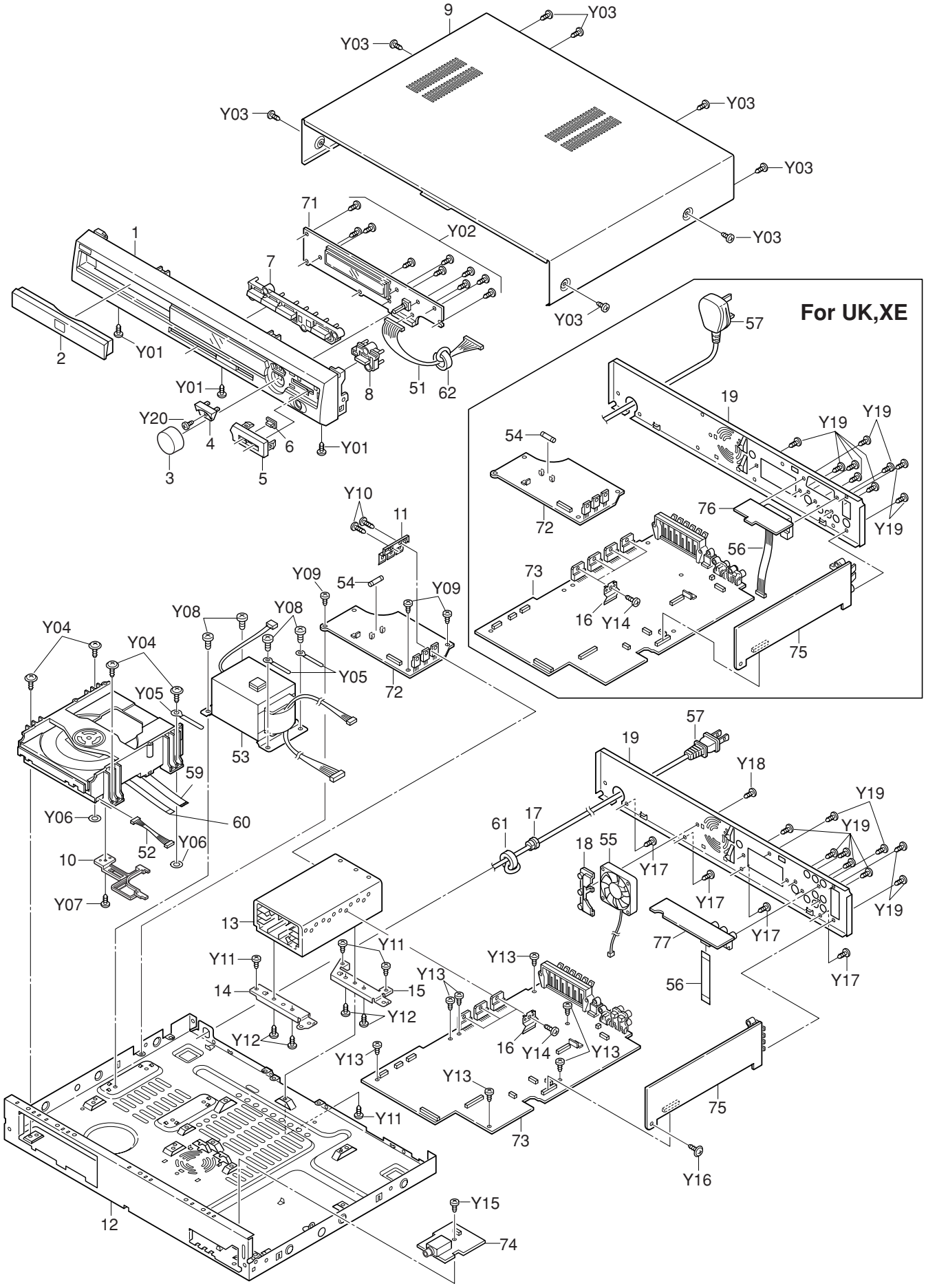
1.FM

Step	Adjusting Circuit	Connection		SG Frequency	Set Position	Adjustment	Remark
		Input	Output				
1	IF Alignment	FM ANT. SG=66dBμV	IC231 3,22pin TP24, TP25	98.0MHz	---	XF233	0.0 ± 0.05V
2	Cover voltage	---	Connect Digital DC voltmeter to TP11(H), TP12(E).	87.5 MHz	Low	---	More than 0.8V
		---		108.0 MHz	High	---	less than 9.0V
3	Tracking	Connect FM SG to FM Antenna (SG=8dBμV)	Connect to VTVM TP13(L) or TP14(R), TP15(E)	90.0 MHz	Low	---	
				106.0 MHz	High	---	

2.AM

Step	Adjusting Circuit	Connection		SG Frequency	Set Position	Adjustment	Remark
		Input	Output				
1	Cover voltage	---	Connect Digital DC voltmeter toTP11(H), TP12(E).	522 kHz	Low	---	more than 0.8V
		---		1611kHz	High	---	less than 9.0V
2	Tracking	Connect AM SG to Test loop Ant.(SG=80dBμV)	Connect to VTVM TP13(L) or TP14(R), TP15(E).	603 kHz	Low	L2151-a	Max.
				1404 kHz	High		

EXPLODED VIEW (CABINET & CHASSIS)



PARTS LIST

PRODUCT SAFETY NOTICE

EACH PRECAUTION IN THIS MANUAL SHOULD BE FOLLOWED DURING SERVICING. COMPONENTS IDENTIFIED WITH THE IEC SYMBOL ⚠ IN THE PARTS LIST AND THE SCHEMATIC DIAGRAM DESIGNATED COMPONENTS IN WHICH SAFETY CAN BE OF SPECIAL SIGNIFICANCE. WHEN REPLACING A COMPONENT IDENTIFIED BY ⚠, USE ONLY THE REPLACEMENT PARTS DESIGNATED, OR PARTS WITH THE SAME RATINGS OF RESISTANCE, WATTAGE OR VOLTAGE THAT ARE DESIGNATED IN THE PARTS LIST IN THIS MANUAL. LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS MUST BE MADE TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE PRODUCT TO THE CUSTOMER.

CAUTION : Regular type resistors and capacitors are not listed. To know those values, refer to the schematic diagram.
Regular type resistors are less than 1/4 W carbon type and chip resistors.
Regular type capacitors are less than 50 V and less than 1000 μF type of Ceramic type and Electrical type.

PACKING & ACCESSORIES

REF.NO.	PART NO.	DESCRIPTION
	614 322 7830	CARTON CASE,INNER(US)
	614 323 7006	CARTON CASE,INNER(730CA)
	614 324 2772	CARTON CASE,INNER(UK)
	614 324 2789	CARTON CASE,INNER(XE)
	614 324 5162	CARTON CASE,INNER(750CA)
	614 322 7847	CUSHION,LEFT,LEFT
	614 322 7854	CUSHION,RIGHT,RIGHT
	614 322 7861	INSTRUCTION MANUAL(US)
	614 323 7020	INSTRUCTION MANUAL(730CA)
	614 324 2840	INSTRUCTION MANUAL(UK)
	614 324 2857	INSTRUCTION MANUAL(XE)
	614 324 5179	INSTRUCTION MANUAL(750CA)
	645 012 2958	POLY BAG,INST MANUAL (All except XE)
	645 013 6535	POLY BAG,INST MANUAL(XE)
	645 045 3540	POLY SHEET,SET(XE)
	645 048 1994	POLY SHEET,SET & SP-BOX (All except XE)
	645 052 1416	POLY BAG,AC CORD(UK)
	645 052 1621	POLY BAG,VIDEO/AUDIO (All except XE)
	645 048 2182	POLY BAG,VIDEO/AUDIO(XE)
	645 005 1227	ASSY,ANTENA,LOOP
	614 245 0055	ANTENNA(All except XE,UK)
	645 041 1373	CABLE,VIDEO
	645 052 2383	REMOCON,RB-TS750MT(CA)
	645 053 5338	REMOCON,RB-TS750ST(UK)(XE)
	645 053 7530	REMOCON,REM-TS750MT(US)
	614 229 4635	ANT,FM ANT(UK)(XE)
or	614 308 5515	ANT,FM ANT(UK)(XE)
	614 324 0990	ASSY,BOX, SPEAKER WOOFER for Service (CA)(UK)
	614 322 5423	ASSY,BOX, SPEAKER WOOFER for Service(US)
	614 324 2888	ASSY,BOX, SPEAKER WOOFER for Service(XE)
	614 324 2680	ASSY,BOX, SPEAKER SATELLITE for Service(UK)
	614 324 2697	ASSY,BOX, SPEAKER SATELLITE for Service(XE)
	614 316 3329	ASSY,BOX, SPEAKER SATELLITE for Service(US)
	614 323 8553	ASSY,BOX, SPEAKER SATELLITE for Service(CA)
	645 043 9735	BATTERY COVER for Service
or	645 048 5053	BATTERY COVER for Service

CABINET & CHASSIS

REF.NO.	PART NO.	DESCRIPTION
1	614 323 6917	ASSY,CABINET,FRONT(CA)
1	614 324 2710	ASSY,CABINET,FRONT(XE)(UK)
1	614 322 7687	ASSY,CABINET,FRONT(US)
2	614 322 7700	ASSY,DEC,DVD TRAY
3	614 322 4839	KNOB,ROTARY,VOL,VOLUME
4	614 322 4785	DEC,ESCUTCHEON,VOL
5	614 322 4778	DEC,ESCUTCHEON,POWER
6	614 322 4761	DEC,WINDOW,STANDBY,STANDBY
7	614 322 4686	BUTTON,PLAY,PLAY/FUNCTION
8	614 322 4693	BUTTON,POWER,POWER SW
9	614 322 7625	ASSY,CABINET,BENDING, AFTER BENDING
10	614 322 5997	MOUNTING,FFC,MOUNTING
11	614 291 6568	MOUNTING,PWB,IC-HEAT SINK
12	614 322 7694	ASSY,CABINET,BOTTOM
13	614 322 4808	HEAT SINK
14	614 322 4822	HOLDER,H/SINK,BOTTOM,HEAT SINK
15	614 322 4815	HOLDER,H/SINK,REAR,HEAT SINK
16	614 316 1417	MOUNTING,IC,IC-HEAT SINK
17	614 129 1901	FIXER,AC CORD
or	614 284 1884	FIXER,AC CORD
18	614 310 3837	MOUNTING,FAN,FAN
19	614 322 4846	PANEL,REAR(US)
19	614 323 4784	PANEL,REAR(UK)
19	614 323 6979	PANEL,REAR(730CA)
19	614 324 2741	PANEL,REAR(XE)
19	614 324 5124	PANEL,REAR(750CA)

FIXING PARTS

REF.NO.	PART NO.	DESCRIPTION
Y01	411 021 6405	SCR S-TPG BIN 3X8, FRONT-BOTTOM FIX
Y02	411 165 3803	SCR S-TPG BIN 2.3X10, FRONT-PWB FIX
Y03	411 098 4205	SCR S-TPG BIN 3X8,CABINET
Y04	411 020 9803	SCR S-TPG BRZ+FLG 3X6, DVD MECHA
Y05	614 129 9082	LUG
Y06	411 092 0906	WASHER Z 2.6X10X0.5,BASE FIX
Y07	411 021 2704	SCR S-TPG BIN 2.6X6,MOUNTING
Y08	411 001 3905	SCR S-TPG BIN 4X6,PT
Y09	411 021 6405	SCR S-TPG BIN 3X8,POWER PWB
Y10	411 021 6405	SCR S-TPG BIN 3X8,IC-HEAT SINK
Y11	411 021 6405	SCR S-TPG BIN 3X8, HOLDER H/S-BOTTOM
Y12	411 021 6405	SCR S-TPG BIN 3X8, HOLDER H/S-BOTTOM
Y13	411 021 6405	SCR S-TPG BIN 3X8,MAIN PWB
Y14	411 021 6405	SCR S-TPG BIN 3X8,IC-HEAT SINK
Y15	411 021 6405	SCR S-TPG BIN 3X8,PHONE PWB
Y16	411 020 9902	SCR S-TPG BRZ+FLG 3X8,TUN PWB
Y17	411 021 3701	SCR S-TPG BIN 3X10,BOTTOM-REAR
Y18	411 021 3701	SCR S-TPG BIN 3X10, MOUNTING FAN-REAR
Y19	411 021 3701	SCR S-TPG BIN 3X10, REAR-ELECT PART
Y20	411 165 3803	SCR S-TPG BIN 2.3X10, FRONT-ESC VOL

PARTS LIST

ELECTRICAL-PARTS

REF.NO.	PART NO.	DESCRIPTION
51	614 323 5415	ASSY,WIRE,MAIN_FRONT 16P
52	614 323 3237	ASSY,WIRE,LOADING-DVD PH-PH 5P, AWG26,L=110
53	⚠645 052 0822	TRANS,POWER,TS750_UK(UK)(XE)
53	⚠645 051 9994	TRANS,POWER,TS750_US(CA)(US)
54	⚠423 027 5207	FUSE 125V 3.15A(CA)(US)
54	⚠423 028 8207	FUSE 250V 1A(UK)(XE)
55	645 053 3853	MOTOR,FAN DC 0.84W,FAN
56	645 054 3159	FLEXIBLE FLAT CABLE, MAIN-SCART UL2896-17-P1.0-***MM (UK)(XE)
56	645 054 1056	FLEXIBLE FLAT CABLE, MAIN-COMPONENT UL2896-11-P1.0-***MM(730CA)(US)
57	⚠645 054 0233	CORD,POWER-1.6MK(UK)
or	⚠645 036 9797	CORD,POWER-1.6MK(UK)
or	⚠645 036 9803	CORD,POWER-1.6MK(UK)
or	⚠645 016 9939	CORD,POWER-1.74MK(XE)
or	⚠614 255 2513	POWER CORD(XE)
57	⚠645 037 7747	CORD,POWER-1.845MK(CA)(US)
or	⚠645 032 7537	CORD,POWER-1.86MK(CA)(US)
59	645 053 8384	FLEXIBLE FLAT CABLE, PICK-FFC UL2896-24-P0.5-250MM
60	645 053 8506	FLEXIBLE FLAT CABLE, IF-FFC UL2896-8-P1.0-140MM
61	645 051 0649	CORE,FERRITE
or	645 031 7637	CORE,FERRITE
or	645 051 0656	CORE,FERRITE
or	645 042 8999	CORE,FERRITE
62	645 051 0649	CORE,FERRITE,HP-MAIN(UK)(US)(XE)
or	645 031 7637	CORE,FERRITE,HP-MAIN(UK)(US)(XE)
	614 323 5408	ASSY,WIRE,MAIN_DG 10P
	614 323 5439	ASSY,WIRE,MAIN_HP 5P

FRONT P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
71	614 321 8210	ASSY,PWB,FRONT(Only initial)
BR601	614 314 6988	MOUNTING,FL
CN601	645 016 9809	PLUG,16P,FRONT-MAIN
D6030	407 012 4406	DIODE 1SS133
D6040	407 012 4406	DIODE 1SS133
D6101	408 032 5404	LED SLP-9118C-51H-S-T1,STANDBY
DS601	407 217 8407	PHOTO DIODE SPS-440-1-G
FL601	645 043 7311	FLOURESCENT TUBE
IC601	410 427 6507	IC MPD16315GB-3BS
or	409 519 6907	IC PT6315
Q6000	405 110 5400	TR KRA102M-A
or	405 000 0508	TR DTA114ES
S6001	645 048 1727	SWITCH,ROTARY(ENCODER)
S6040	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6041	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6042	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6043	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6050	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6060	614 215 9828	SWITCH,TACT
or	645 035 9224	SWITCH,PUSH 1P-1T

POWER SUPPLY P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
72	614 321 8234	ASSY,PWB,DG(Only initial)(US)(CA)
72	614 321 8289	ASSY,PWB,DG(Only initial)(UK)(XE)
CN401	614 310 2519	PLUG,10P(UK)(XE)
or	614 310 2519	PLUG,10P(US)(CA)
or	645 005 8158	PLUG,10P
CN402	645 005 9315	PLUG,2P
D4000	407 012 4406	DIODE 1SS133(UK)(XE)
D4001	⚠407 097 8009	DIODE MPG06G(UK)(XE)
D4002	⚠407 097 8009	DIODE MPG06G(UK)(XE)
D4003	⚠407 097 8009	DIODE MPG06G(UK)(XE)
D4004	⚠407 097 8009	DIODE MPG06G(UK)(XE)
D4005	407 099 4603	ZENER DIODE MTZJ3.9B(UK)(XE)
D4005	407 099 4603	ZENER DIODE MTZJ3.9B (All except UK,XE)
D4006	⚠407 097 8009	DIODE MPG06G(UK)(XE)
D4007	⚠407 097 8009	DIODE MPG06G(UK)(XE)
D4008	407 099 6102	ZENER DIODE MTZJ10B
D4009	407 012 4406	DIODE 1SS133
D4010	407 012 4406	DIODE 1SS133
D4012	407 099 6805	ZENER DIODE MTZJ13B
FPC41	⚠645 031 7903	HOLDER,FUSE
or	⚠645 006 4760	HOLDER,FUSE
FPC42	⚠645 031 7903	HOLDER,FUSE
or	⚠645 006 4760	HOLDER,FUSE
IC401	⚠409 463 6701	IC KIA7805API
IC402	⚠409 521 9705	IC KA78R12STU
L4000	⚠645 038 7364	INDUCTOR,70U
PR400	⚠645 042 2515	PROTECTOR,0.2A 125V
Q4000	405 143 8706	TR KTC3199-GR(UK)(XE)
or	405 017 9600	TR 2SC3330-T(UK)(XE)
or	405 017 9709	TR 2SC3330-U(UK)(XE)
or	405 011 8500	TR 2SC1740S-R(UK)(XE)
or	405 011 8609	TR 2SC1740S-S(UK)(XE)
Q4001	405 143 6504	TR KTA1267-GR
or	405 004 4601	TR 2SA608-F-SPA
or	405 004 5103	TR 2SA608-G-SPA
or	405 006 1806	TR 2SA933S-R
or	405 006 1905	TR 2SA933S-S
Q4002	405 143 6504	TR KTA1267-GR
or	405 004 4601	TR 2SA608-F-SPA
or	405 004 5103	TR 2SA608-G-SPA
or	405 006 1806	TR 2SA933S-R
or	405 006 1905	TR 2SA933S-S
Q4006	⚠405 138 6502	TR KTB1366Y
Q4007	405 143 6504	TR KTA1267-GR
or	405 004 4601	TR 2SA608-F-SPA
or	405 004 5103	TR 2SA608-G-SPA
or	405 006 1806	TR 2SA933S-R
or	405 006 1905	TR 2SA933S-S
R4000	⚠402 080 9803	CARBON 3.3M J- 1/2W(US)(CA)
or	⚠402 078 8108	CARBON 3.3M J- 1/2W(US)(CA)
or	⚠402 078 9501	CARBON 3.3M J- 1/2W(US)(CA)
or	⚠402 087 3408	RESISTOR 3.3M J- 1/2W(US)(CA)
R4008	⚠402 081 1004	FUSIBLE RES 10 JA 1/4W
R4013	⚠402 083 7707	RESISTOR 1K J- 1W
RY401	⚠645 030 5597	RELAY,PRIMARY(UK)(XE)
or	⚠645 035 6575	RELAY,PRIMARY(UK)(XE)
T4000	⚠645 052 0846	TRANS,POWER(UK)(XE)
WR401	614 017 6964	TERMINAL BOARD(US)(CA)
WR401	614 017 8203	TERMINAL BOARD(UK)(XE)
WR402	614 017 6964	TERMINAL BOARD(US)(CA)
WR402	614 017 8203	TERMINAL BOARD(UK)(XE)

PARTS LIST

MAIN,AMP-DVD P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
73	614 321 8197	ASSY,PWB,MAIN, AMP_DVD(Only initial)(CA)
73	614 321 8203	ASSY,PWB,MAIN, AMP_DVD(Only initial)(UK)(XE)
73	614 324 0600	ASSY,PWB,MAIN(Only initial)(US)
C1050	⚠403 373 7902	ELECT 150U M 6.3V
C1901	⚠403 373 7902	ELECT 150U M 6.3V
C4102	403 325 0302	ELECT 2200U M 25V
C4103	403 325 0302	ELECT 2200U M 25V
C4108	403 325 9701	ELECT 4700U M 25V
C4109	403 325 2207	ELECT 3300U M 35V(US)
C4109	403 325 2306	ELECT 4700U M 35V(All except US)
C4110	403 325 2207	ELECT 3300U M 35V(US)
C4110	403 325 2306	ELECT 4700U M 35V(All except US)
C4120	⚠403 370 7004	ELECT 330U M 6.3V
C4128	⚠403 373 8404	ELECT 220U M 10V
C4130	⚠403 373 9302	ELECT 100U M 25V
C4300	⚠403 369 2805	DL-ELECT 0.047F Z 5.5V(UK)(XE)
or	⚠403 262 8607	DL-ELECT 0.047F Z 5.5V(UK)(XE)
or	⚠403 304 4802	DL-ELECT 0.047F Z 5.5V(UK)(XE)
C4301	403 325 0401	ELECT 1000U M 6.3V
C4307	⚠403 305 1602	CERAMIC 27P J 50V
C4308	⚠403 305 1503	CERAMIC 22P J 50V
C4648	403 184 9805	MT-POLYEST 0.22U J 50V
C4649	403 184 9805	MT-POLYEST 0.22U J 50V
C4651	403 184 9805	MT-POLYEST 0.22U J 50V
C4652	403 184 9805	MT-POLYEST 0.22U J 50V
C4653	403 184 9300	MT-POLYEST 0.047U J 50V
C4654	403 184 9300	MT-POLYEST 0.047U J 50V
C4748	403 184 9805	MT-POLYEST 0.22U J 50V
C4749	403 184 9805	MT-POLYEST 0.22U J 50V
C4751	403 184 9805	MT-POLYEST 0.22U J 50V
C4752	403 184 9805	MT-POLYEST 0.22U J 50V
C4755	⚠403 374 0001	ELECT 33U M 35V
C4756	⚠403 374 0001	ELECT 33U M 35V
C4848	403 184 9805	MT-POLYEST 0.22U J 50V
C4849	403 184 9805	MT-POLYEST 0.22U J 50V
C4851	403 185 0108	MT-POLYEST 0.47U J 50V (All except US)
C4852	403 185 0108	MT-POLYEST 0.47U J 50V (All except US)
C4854	403 184 9300	MT-POLYEST 0.047U J 50V (All except US)
C4856	⚠403 374 0001	ELECT 33U M 35V(All except US)
C4857	⚠403 374 0001	ELECT 33U M 35V(All except US)
C8231	⚠403 305 1404	CERAMIC 18P J 50V
C8232	⚠403 305 1404	CERAMIC 18P J 50V
C8535	⚠403 373 7902	ELECT 150U M 6.3V
CN100	645 037 6207	SOCKET,FFC 24P
CN160	614 310 2465	PLUG,5P
or	645 005 9292	PLUG,5P
CN162	645 043 8882	SOCKET,FPC 8P
CN410	645 006 1998	PLUG,5P
CN411	645 004 2904	PLUG,4P
CN412	614 310 2519	PLUG,10P
or	645 005 8158	PLUG,10P
CN413	614 310 2465	PLUG,5P
or	645 005 9292	PLUG,5P
CN420	614 310 2434	PLUG,2P
or	645 005 7366	PLUG,2P
CN470	645 051 9437	TERMINAL,SP-6P
CN490	645 037 3831	JACK,RCA,VIDEO
CN491	645 044 9086	SOCKET,DIN 4P,S-VIDEO
CN492	645 053 8346	JACK,RCA-4P,RCA-4P (All except UK,XE)
CN492	645 053 8353	JACK,RCA-2P,RCA-2P(UK)(XE)
CN495	645 043 8974	SOCKET,FPC 17P(UK)(XE)
CN496	614 310 2571	PLUG,16P
or	645 016 9809	PLUG,16P
CN497	645 033 7826	PLUG,11P
CN498	645 043 8929	SOCKET,FPC 11P(CA)(US)
CN499	614 305 6317	CORD,1P CONNECTOR
D1101	407 221 1807	DIODE KDS120E
or	407 179 1805	DIODE DAP222
D1102	407 221 1906	DIODE KDS121E
or	407 162 8507	DIODE DAN222
D4100	⚠407 196 5800	DIODE 1N5402BD82
D4101	⚠407 196 5800	DIODE 1N5402BD82
D4102	⚠407 196 5800	DIODE 1N5402BD82
D4103	⚠407 196 5800	DIODE 1N5402BD82
D4104	⚠407 196 5800	DIODE 1N5402BD82
D4105	⚠407 196 5800	DIODE 1N5402BD82
D4106	⚠407 097 8009	DIODE MPG06G
D4107	⚠407 097 8009	DIODE MPG06G
D4108	⚠407 097 8009	DIODE MPG06G
D4109	⚠407 097 8009	DIODE MPG06G
D4110	⚠407 097 8009	DIODE MPG06G
D4111	⚠407 097 8009	DIODE MPG06G
D4112	407 099 5303	ZENER DIODE MTZJ5.6B
D4113	407 099 9509	ZENER DIODE MTZJ30B
D4114	⚠408 044 6307	DIODE SB140L 19C2-004
D4115	⚠408 044 6307	DIODE SB140L 19C2-004
D4200	407 012 4406	DIODE 1SS133
D4201	407 012 4406	DIODE 1SS133
D4300	⚠407 097 8009	DIODE MPG06G
D4301	407 012 4406	DIODE 1SS133
D4501	407 012 4406	DIODE 1SS133
D4502	407 012 4406	DIODE 1SS133
D4580	407 099 5303	ZENER DIODE MTZJ5.6B
D4581	407 063 9207	ZENER DIODE MTZJ7.5B
D4582	407 063 9207	ZENER DIODE MTZJ7.5B
D4800	407 012 4406	DIODE 1SS133
D4801	407 012 4406	DIODE 1SS133
D4950	407 221 1906	DIODE KDS121E(UK)(XE)
or	407 162 8507	DIODE DAN222(UK)(XE)
IC100	409 482 3903	IC LA9702WL-MPB
IC101	409 521 9606	IC CD4066BCM
IC130	409 500 6404	IC LC78661W-D
IC141	409 447 3702	IC T224162B-35S
or	410 367 3604	IC LC324265AT-25DV-TLM
or	409 447 3702	IC T224162B-35S
or	410 388 4505	IC M11B416256A-35T
IC141	410 375 9407	IC LC324265AT-25DV-MPB(UK)(XE)
IC141	410 375 9407	IC LC324265AT-25DV-MPB(US)
IC160	409 520 8303	IC LA6560
IC410	⚠409 519 7201	IC PQ1CG21H2RZ,REG
IC411	⚠409 519 7201	IC PQ1CG21H2RZ,REG
IC412	⚠409 521 9804	IC KA7805R
IC430	410 438 1706	IC M38039MC-074FP,MICON
IC450	409 521 9507	IC CD4052BCM
IC451	409 519 7003	IC NJW1150M,6CH-VOL
IC460	409 426 1903	IC KIA4558F
or	409 039 7804	IC NJM4558M
IC461	409 426 1903	IC KIA4558F
or	409 039 7804	IC NJM4558M
IC462	⚠409 472 5306	IC LM1876TF
IC470	409 426 1903	IC KIA4558F
or	409 039 7804	IC NJM4558M
IC471	409 426 1903	IC KIA4558F
or	409 039 7804	IC NJM4558M
IC472	⚠409 472 5306	IC LM1876TF(UK)(XE)
IC480	409 426 1903	IC KIA4558F
or	409 039 7804	IC NJM4558M
IC481	409 426 1903	IC KIA4558F(UK)(XE)
IC481	409 039 7804	IC NJM4558M
IC482	⚠409 521 9200	IC LM4700TF(UK)(XE)
IC483	⚠409 521 9101	IC LM3876TF(All except US)
IC490	409 426 1903	IC KIA4558F
IC490	409 039 7804	IC NJM4558M(UK)(XE)

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
IC491	409 039 7804	IC NJM4558M(UK)(XE)
IC493	409 521 9606	IC CD4066BCM
IC495	409 426 1903	IC KIA4558F
or	409 039 7804	IC NJM4558M
IC800	409 522 0701	IC ZR36705TQC
IC801	410 430 9601	IC S524C20D21-SCT0
or	410 429 7809	IC S524C20D21-SCB0
or	410 429 7908	IC AT24C02N-10SI-2.7
IC802	409 505 0803	IC PST3627U
IC806	410 430 9403	IC 74VHCT08AMTCX
IC818	⚠410 440 2500	IC ASSY (IC LE28DW8163T-70T-MPB)
IC820	410 422 1408	IC ZR36732
IC821	409 482 0209	IC K4S161622D-TC80
IC850	⚠409 521 9309	IC RC1117S
IC851	⚠409 521 9408	IC RC1117S33
IC870	409 501 9701	IC PCM1602Y
L1001	645 034 7887	INDUCTOR,1000 OHM
or	645 020 1813	INDUCTOR,1000 OHM
L1090	645 034 7887	INDUCTOR,1000 OHM
or	645 020 1813	INDUCTOR,1000 OHM
L1100	645 034 7887	INDUCTOR,1000 OHM
or	645 020 1813	INDUCTOR,1000 OHM
L1190	645 034 7887	INDUCTOR,1000 OHM
or	645 020 1813	INDUCTOR,1000 OHM
L1191	645 034 7887	INDUCTOR,1000 OHM
or	645 020 1813	INDUCTOR,1000 OHM
L1300	645 034 7887	INDUCTOR,1000 OHM
or	645 020 1813	INDUCTOR,1000 OHM
L1301	645 034 7887	INDUCTOR,1000 OHM
or	645 020 1813	INDUCTOR,1000 OHM
L4100	⚠645 053 8544	INDUCTOR,210U
L4101	⚠645 045 8613	INDUCTOR,10U
or	⚠645 048 4469	INDUCTOR,22U
L4102	⚠645 045 8613	INDUCTOR,10U
or	⚠645 048 4469	INDUCTOR,22U
L4103	⚠645 053 8544	INDUCTOR,210U
L4104	⚠645 045 8613	INDUCTOR,10U
or	⚠645 048 4469	INDUCTOR,22U
L4300	645 001 4550	INDUCTOR,10U K
L4650	645 053 7493	INDUCTOR,0.7U
L4651	645 053 7493	INDUCTOR,0.7U
L4750	645 053 7493	INDUCTOR,0.7U
L4751	645 053 7493	INDUCTOR,0.7U
L4850	645 053 7493	INDUCTOR,0.7U
L4851	645 045 6206	INDUCTOR,AIR 0.7U(All except US)
L4960	645 040 6430	INDUCTOR,2.2U M
L4961	645 040 6430	INDUCTOR,2.2U M
L4962	645 040 6430	INDUCTOR,2.2U M
L8240	645 034 7887	INDUCTOR,1000 OHM
or	645 020 1813	INDUCTOR,1000 OHM
L8301	645 034 7887	INDUCTOR,1000 OHM
or	645 020 1813	INDUCTOR,1000 OHM
L8507	645 034 7887	INDUCTOR,1000 OHM
or	645 020 1813	INDUCTOR,1000 OHM
L8780	645 034 7887	INDUCTOR,1000 OHM
or	645 020 1813	INDUCTOR,1000 OHM
L8781	645 034 7887	INDUCTOR,1000 OHM
or	645 020 1813	INDUCTOR,1000 OHM
LUG03	645 023 8987	FIXER
LUG04	645 023 8987	FIXER
LUG05	645 023 8987	FIXER
LUG06	645 023 8987	FIXER
LUG07	645 006 4432	FIXER
LUG08	645 006 4432	FIXER
LUG09	645 023 8987	FIXER
LUG10	645 023 8987	FIXER
PR410	⚠645 042 2737	PROTECTOR,7A 125V
PR411	⚠645 042 2737	PROTECTOR,7A 125V
PR412	⚠645 042 2515	PROTECTOR,0.2A 125V
PR420	⚠645 027 4169	PROTECTOR,0.125A 125V
PR450	⚠645 042 2515	PROTECTOR,0.2A 125V
PR451	⚠645 042 2515	PROTECTOR,0.2A 125V
Q1000	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q1001	405 146 1704	TR KTA1504-Y
or	405 146 9700	TR KTA1504-GR
or	405 134 5905	TR 2SA1037AK-R
or	405 002 0308	TR 2SA1037K-R
or	405 005 5508	TR 2SA812-M6
Q1002	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q1003	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q1004	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q1005	405 158 5905	TR KTA1505-Y
or	405 035 5509	TR 2SA1036K-R
Q1006	405 158 5905	TR KTA1505-Y
or	405 035 5509	TR 2SA1036K-R
Q1010	405 153 2008	TR 2SK3018
Q1011	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q1012	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q1013	405 146 1704	TR KTA1504-Y
or	405 146 9700	TR KTA1504-GR
or	405 134 5905	TR 2SA1037AK-R
or	405 002 0308	TR 2SA1037K-R
or	405 005 5508	TR 2SA812-M6
Q1014	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q1016	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q1020	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q1021	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q1510	405 146 1704	TR KTA1504-Y
or	405 146 9700	TR KTA1504-GR
or	405 134 5905	TR 2SA1037AK-R
or	405 002 0308	TR 2SA1037K-R
or	405 005 5508	TR 2SA812-M6
Q1511	405 146 1605	TR KRC102S
or	405 132 3101	TR DTC114EKA
Q1520	405 146 1704	TR KTA1504-Y
or	405 146 9700	TR KTA1504-GR
or	405 134 5905	TR 2SA1037AK-R
or	405 002 0308	TR 2SA1037K-R
or	405 005 5508	TR 2SA812-M6
Q1521	405 146 2107	TR KTC3875-Y

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q4100	⚠405 141 3604	TR KTA1273-Y
Q4101	405 159 0503	TR KRC107S
or	405 141 5608	TR DTC114YKA
Q4102	405 159 0503	TR KRC107S
or	405 141 5608	TR DTC114YKA
Q4103	405 159 0503	TR KRC107S
or	405 141 5608	TR DTC114YKA
Q4200	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q4201	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q4203	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q4204	405 159 0503	TR KRC107S
or	405 141 5608	TR DTC114YKA
Q4206	405 159 0503	TR KRC107S
or	405 141 5608	TR DTC114YKA
Q4207	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q4208	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q4209	405 143 8706	TR KTC3199-GR
or	405 017 9600	TR 2SC3330-T
or	405 017 9709	TR 2SC3330-U
or	405 011 8500	TR 2SC1740S-R
or	405 011 8609	TR 2SC1740S-S
Q4300	405 141 3703	TR KTA1271-Y
or	405 008 2405	TR 2SB698-F
or	405 008 2504	TR 2SB698-G
Q4302	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q4303	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q4500	405 159 0503	TR KRC107S
or	405 141 5608	TR DTC114YKA
Q4501	405 159 0503	TR KRC107S
or	405 141 5608	TR DTC114YKA
Q4502	405 151 6107	TR KRA107S
or	405 141 5707	TR DTA114YKA
Q4503	405 166 7007	TR KTD1304
Q4504	405 166 7007	TR KTD1304
Q4510	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q4511	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q4512	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6

REF.NO.	PART NO.	DESCRIPTION
Q4513	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q4514	405 151 6107	TR KRA107S
or	405 141 5707	TR DTA114YKA
Q4515	405 151 6107	TR KRA107S
or	405 141 5707	TR DTA114YKA
Q4580	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q4581	405 146 2107	TR KTC3875-Y
or	405 146 2206	TR KTC3875-GR
or	405 014 4509	TR 2SC2412K-R
or	405 011 1006	TR 2SC1623-L6
Q4582	405 146 1704	TR KTA1504-Y
or	405 146 9700	TR KTA1504-GR
or	405 134 5905	TR 2SA1037AK-R
or	405 002 0308	TR 2SA1037K-R
or	405 005 5508	TR 2SA812-M6
Q4620	405 159 0503	TR KRC107S
or	405 141 5608	TR DTC114YKA
Q4621	405 159 0503	TR KRC107S
or	405 141 5608	TR DTC114YKA
Q4640	405 166 7007	TR KTD1304
Q4641	405 166 7007	TR KTD1304
Q4740	405 166 7007	TR KTD1304
Q4741	405 166 7007	TR KTD1304
Q4840	405 166 7007	TR KTD1304
Q4841	405 166 7007	TR KTD1304
Q4842	405 151 6107	TR KRA107S
or	405 141 5707	TR DTA114YKA
Q4843	405 159 0503	TR KRC107S
or	405 141 5608	TR DTC114YKA
Q4844	405 159 0503	TR KRC107S(All except US)
or	405 141 5608	TR DTC114YKA(All except US)
Q4845	405 151 6107	TR KRA107S(All except US)
or	405 141 5707	TR DTA114YKA(All except US)
Q4846	405 159 0503	TR KRC107S(All except US)
or	405 141 5608	TR DTC114YKA(All except US)
Q4848	405 159 0503	TR KRC107S
or	405 141 5608	TR DTC114YKA
Q4880	405 146 1704	TR KTA1504-Y(US)
or	405 146 9700	TR KTA1504-GR(US)
or	405 134 5905	TR 2SA1037AK-R(US)
or	405 002 0308	TR 2SA1037K-R(US)
or	405 005 5508	TR 2SA812-M6(US)
Q4881	405 166 7007	TR KTD1304(US)
Q4882	405 166 7007	TR KTD1304(US)
Q4900	405 166 7007	TR KTD1304
Q4901	405 166 7007	TR KTD1304
Q4902	405 159 0503	TR KRC107S
or	405 141 5608	TR DTC114YKA
Q4903	405 159 0503	TR KRC107S
or	405 141 5608	TR DTC114YKA
Q4905	405 151 6107	TR KRA107S
or	405 141 5707	TR DTA114YKA
Q4906	405 166 7007	TR KTD1304
Q4907	405 166 7007	TR KTD1304
Q4911	405 159 0503	TR KRC107S
or	405 141 5608	TR DTC114YKA
Q4920	405 166 7007	TR KTD1304
Q4921	405 151 6107	TR KRA107S
or	405 141 5707	TR DTA114YKA
Q4950	405 151 6107	TR KRA107S(UK)(XE)
or	405 141 5707	TR DTA114YKA(UK)(XE)
Q4951	405 159 0503	TR KRC107S(UK)(XE)
or	405 141 5608	TR DTC114YKA(UK)(XE)
Q4952	405 159 0503	TR KRC107S(UK)(XE)

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
or	405 141 5608	TR DTC114YKA(UK)(XE)
Q8880	405 146 1704	TR KTA1504-Y
or	405 146 9700	TR KTA1504-GR
or	405 134 5905	TR 2SA1037AK-R
or	405 002 0308	TR 2SA1037K-R
or	405 005 5508	TR 2SA812-M6
Q8882	405 159 0503	TR KRC107S
or	405 141 5608	TR DTC114YKA
R4107	⚠401 202 8205	MT-GLAZE 3K FA 1/16W
R4108	⚠401 230 2503	MT-GLAZE 1K FA 1/16W
R4111	⚠401 218 4604	MT-GLAZE 5.6K FA 1/16W
R4112	⚠401 230 2503	MT-GLAZE 1K FA 1/16W
R4115	⚠402 085 2205	RESISTOR 6.8 J- 2W
R4116	⚠402 081 0106	FUSIBLE RES 2.2 JA 1/4W
R4650	⚠402 082 1300	RESISTOR 4.7 J- 1W
R4651	⚠402 082 1300	RESISTOR 4.7 J- 1W
R4658	⚠402 082 2802	RESISTOR 10 J- 1W
R4659	⚠402 082 2802	RESISTOR 10 J- 1W
R4750	⚠402 082 1300	RESISTOR 4.7 J- 1W
R4751	⚠402 082 1300	RESISTOR 4.7 J- 1W
R4758	⚠402 082 2802	RESISTOR 10 J- 1W
R4759	⚠402 082 2802	RESISTOR 10 J- 1W
R4850	⚠402 082 1300	RESISTOR 4.7 J- 1W
R4851	⚠402 082 8606	RESISTOR 2.2 J- 1W(All except US)
R4858	⚠402 082 2802	RESISTOR 10 J- 1W
R4859	⚠402 082 2802	RESISTOR 10 J- 1W(All except US)
R8221	⚠401 230 8901	MT-GLAZE 390 FA 1/16W
R8500	⚠401 262 8405	MT-GLAZE 510 FA 1/16W
R8501	⚠401 230 2503	MT-GLAZE 1K FA 1/16W
RY420	614 224 4531	RELAY
or	645 035 6582	RELAY
SG491	645 045 7449	SURGE-ABSORBER
SG492	645 045 7449	SURGE-ABSORBER
SG493	645 045 7449	SURGE-ABSORBER
SG871	645 045 7449	SURGE-ABSORBER
SG872	645 045 7449	SURGE-ABSORBER
SH401	614 322 4877	SHIELD,SP,SOCKET
X1300	645 052 2970	OSC,CERAMIC 16.93MHZ
X4300	645 053 4393	OSC,CERAMIC 8.00MHZ
X4301	645 053 8339	OSC,CRYSTAL 32.768KHZ
or	645 032 1627	OSC,CRYSTAL 32.768KHZ
X8000	645 052 2994	OSC,CERAMIC 12.50MHZ
X8230	645 053 4270	OSC,CRYSTAL 27.000MHZ
or	645 045 8293	OSC,CRYSTAL 27.000MHZ

HEADPHONE P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
74	614 321 8241	ASSY,PWB,HEADPHONE(Only initial)
CN405	614 310 2465	PLUG,5P
or	645 005 9292	PLUG,5P
CN407	645 009 0042	JACK,PHONE D6.43
L4050	645 001 4550	INDUCTOR,10U K
R4050	⚠402 082 1201	RESISTOR 330 J- 1W
R4051	⚠402 082 1201	RESISTOR 330 J- 1W
SG405	645 045 7449	SURGE-ABSORBER
SG406	645 045 7449	SURGE-ABSORBER
SG409	645 045 7449	SURGE-ABSORBER

TUNER P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
75	614 321 8227	ASSY,PWB,TUNER(Only initial) (US)(CA)
75	614 321 8272	ASSY,PWB,TUNER(Only initial) (UK)(XE)
B2101	645 006 3602	INDUCTOR,1.1UH(UK)(XE)
C2457	403 259 0508	NP-ELECT 1U M 50V
or	403 106 1603	NP-ELECT 1U Q 50V
CN201	645 052 2932	TERMINAL(UK)(XE)
CN201	645 005 0695	TERMINAL,ANT(All except UK,XE)
or	645 031 7910	TERMINAL(All except UK,XE)
CN202	614 221 8273	TERMINAL
CN241	645 033 7833	SOCKET,11P
D2101	407 157 8109	VARACTOR DI SVC211-B (All except UK,XE)
D2102	407 157 8109	VARACTOR DI SVC211-B (All except UK,XE)
D2103	407 012 4406	DIODE 1SS133(All except UK,XE)
D2104	407 012 4406	DIODE 1SS133(All except UK,XE)
D2151	407 012 4406	DIODE 1SS133
D2301	407 063 9108	ZENER DIODE MTZJ6.8B
D2451	407 012 4406	DIODE 1SS133
D2452	407 153 7502	ZENER DIODE GZS3.0B
D2453	407 012 4406	DIODE 1SS133(UK)(XE)
D2466	407 012 4406	DIODE 1SS133(UK)(XE)
D2467	407 012 4406	DIODE 1SS133(UK)(XE)
IC211	409 292 5807	IC TA8176SN(All except UK,XE)
IC231	409 474 3201	IC LA1844ML
IC241	409 439 4502	IC LC72121M-D
IC251	409 447 3900	IC LC72722(UK)(XE)
L2101	645 018 0163	COIL,AIR(All except UK,XE)
L2102	645 018 0255	COIL,AIR(All except UK,XE)
L2103	645 002 1534	INDUCTOR,8.2U K(All except UK,XE)
or	645 031 7859	INDUCTOR,8.2U K(All except UK,XE)
L2151	645 023 0127	TUNER
L2451	645 001 4581	INDUCTOR,100U K
or	645 031 7842	INDUCTOR,100U K
L2501	645 001 4581	INDUCTOR,100U K(UK)(XE)
or	645 031 7842	INDUCTOR,100U K(UK)(XE)
L2502	645 001 4581	INDUCTOR,100U K(UK)(XE)
or	645 031 7842	INDUCTOR,100U K(UK)(XE)
L2503	⚠645 004 0511	INDUCTOR,270U J
Q2140	405 143 8706	TR KTC3199-GR(UK)(XE)
or	405 017 9600	TR 2SC3330-T(UK)(XE)
or	405 017 9709	TR 2SC3330-U(UK)(XE)
or	405 011 8500	TR 2SC1740S-R(UK)(XE)
or	405 011 8609	TR 2SC1740S-S(UK)(XE)
Q2201	405 151 4202	TR KTC3193-O(UK)(XE)
or	405 151 4103	TR KTC3193-Y(UK)(XE)
or	405 016 0806	TR 2SC2839-E(UK)(XE)
Q2310	405 143 8706	TR KTC3199-GR(UK)(XE)
or	405 017 9600	TR 2SC3330-T(UK)(XE)
or	405 017 9709	TR 2SC3330-U(UK)(XE)
or	405 011 8500	TR 2SC1740S-R(UK)(XE)
or	405 011 8609	TR 2SC1740S-S(UK)(XE)
Q2451	405 151 5209	TR KRA107M
or	405 000 0904	TR DTA114YS
Q2502	405 151 5209	TR KRA107M(UK)(XE)
or	405 000 0904	TR DTA114YS(UK)(XE)
Q2701	405 143 8706	TR KTC3199-GR(UK)(XE)
or	405 017 9600	TR 2SC3330-T(UK)(XE)
or	405 017 9709	TR 2SC3330-U(UK)(XE)
or	405 011 8500	TR 2SC1740S-R(UK)(XE)
or	405 011 8609	TR 2SC1740S-S(UK)(XE)
Q2801	405 143 8706	TR KTC3199-GR(UK)(XE)
or	405 017 9600	TR 2SC3330-T(UK)(XE)
or	405 017 9709	TR 2SC3330-U(UK)(XE)
or	405 011 8500	TR 2SC1740S-R(UK)(XE)
or	405 011 8609	TR 2SC1740S-S(UK)(XE)
R2101	⚠401 012 4404	CARBON 100 JA 1/4W(UK)(XE)
or	⚠401 017 0708	CARBON 270 JA 1/4W (All except UK,XE)
R2301	⚠401 017 0708	CARBON 270 JA 1/4W
R2311	⚠401 017 0708	CARBON 270 JA 1/4W
U2101	645 033 5327	TUNER,FM(UK)(XE)
X2451	645 053 4263	OSC,CRYSTAL 7.2MHZ
or	645 023 4965	OSC,CRYSTAL 7.2MHZ
X2501	645 035 8326	OSC,CRYSTAL 4.332MHZ(UK)(XE)
XF211	645 026 2975	FILTER,BP 108MHZ(All except UK,XE)
or	614 252 1045	FILTER,LC(All except UK,XE)

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
XF221	645 010 0079	CERAMIC FILTER 10.70MHZ(UK)(XE)
or	645 010 7665	CERAMIC FILTER 10.70MHZ (All except UK,XE)
or	614 231 0199	FILTER(All except UK,XE)
or	614 240 2917	FILTER,CERAM(UK)(XE)
or	614 030 5074	I.F FILTER(All except UK,XE)
or	614 254 3214	FILTER(UK)(XE)
XF222	645 010 0079	CERAMIC FILTER 10.70MHZ(UK)(XE)
or	614 240 2917	FILTER,CERAM(UK)(XE)
or	614 254 3214	FILTER(UK)(XE)
XF222	645 010 7665	CERAMIC FILTER 10.70MHZ (All except UK,XE)
XF222	614 231 0199	FILTER(All except UK,XE)
XF222	614 030 5074	I.F FILTER(All except UK,XE)
XF231	614 246 0849	FILTER
XF233	645 039 9923	TRANS,IF 10.7MHZ

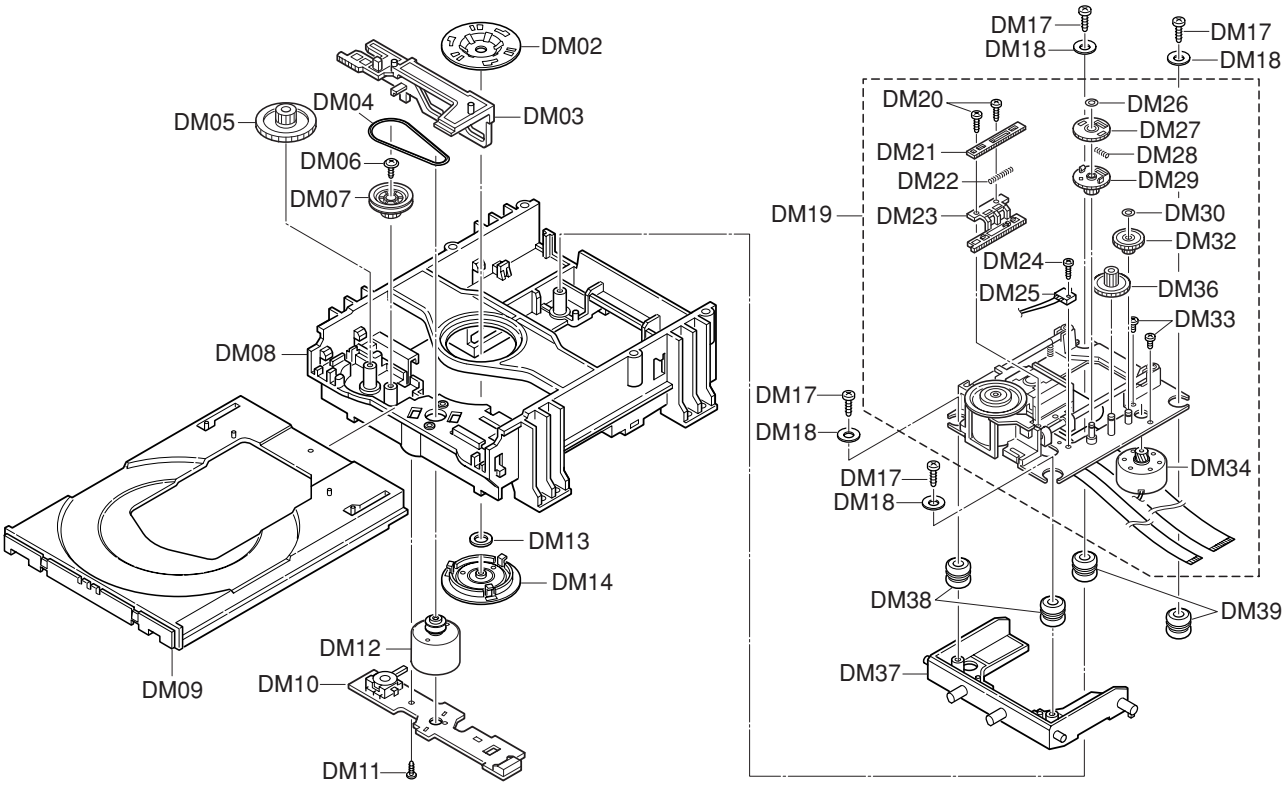
SCART P.W.BOARD ASSY(UK,XE Only)

REF.NO.	PART NO.	DESCRIPTION
76	614 321 8258	ASSY,PWB,SCART(Only initial)
CN301	645 054 3456	SOCKET,FPC 17P
CN302	645 041 8433	SOCKET,RGB 21P,SCART
L3001	645 001 4550	INDUCTOR,10U K
or	645 031 7835	INDUCTOR,10U K
L3002	645 001 4550	INDUCTOR,10U K
or	645 031 7835	INDUCTOR,10U K
L3003	645 001 5441	INDUCTOR,2.2U K
or	645 045 9139	INDUCTOR,2.2U K
L3301	645 001 4550	INDUCTOR,10U K
or	645 031 7835	INDUCTOR,10U K
L3501	645 001 5441	INDUCTOR,2.2U K
or	645 045 9139	INDUCTOR,2.2U K
L3502	645 001 5441	INDUCTOR,2.2U K
or	645 045 9139	INDUCTOR,2.2U K
L3503	645 001 5441	INDUCTOR,2.2U K
or	645 045 9139	INDUCTOR,2.2U K
Q3301	405 143 6504	TR KTA1267-GR
or	405 004 4601	TR 2SA608-F-SPA
or	405 004 5103	TR 2SA608-G-SPA
or	405 006 1806	TR 2SA933S-R
or	405 006 1905	TR 2SA933S-S
S3501	645 040 6102	SWITCH,SLIDE 2P-2TX4
SG301	⚠645 045 7449	SURGE-ABSORBER
SG302	⚠645 045 7449	SURGE-ABSORBER
SG303	⚠645 045 7449	SURGE-ABSORBER
SG304	⚠645 045 7449	SURGE-ABSORBER
SG331	⚠645 045 7449	SURGE-ABSORBER
SH301	614 314 0733	SHIELD,SHIELD

COMPONENT P.W.BOARD ASSY(US,CA Only)

REF.NO.	PART NO.	DESCRIPTION
77	614 323 3350	ASSY,PWB,COMPONENT(Only initial)
CN351	645 054 1018	JACK,RCA-3,COMPONENT
CN352	645 054 1216	SOCKET,FPC 11P
CN353	614 239 1839	TERMINAL
L3501	645 001 5441	INDUCTOR,2.2U K
or	645 045 9139	INDUCTOR,2.2U K
L3502	645 001 5441	INDUCTOR,2.2U K
or	645 045 9139	INDUCTOR,2.2U K
L3503	645 001 5441	INDUCTOR,2.2U K
or	645 045 9139	INDUCTOR,2.2U K
S3501	645 040 6102	SWITCH,SLIDE 2P-2TX4

EXPLODED VIEW (DVD MECHANISM)



PARTS LIST

DVD MECHANISM ASSY

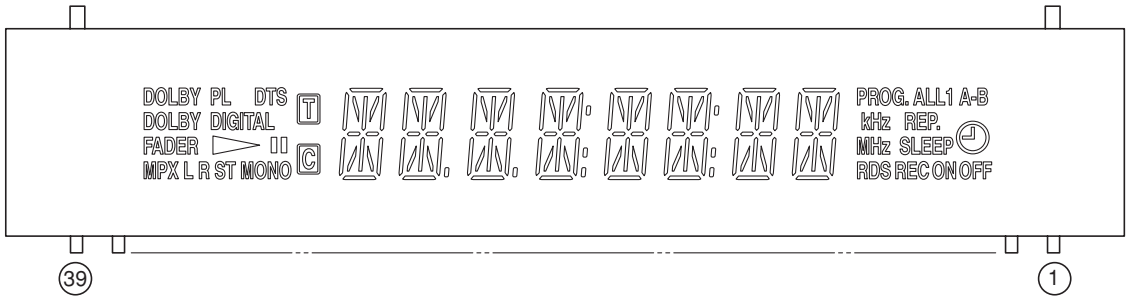
REF.NO.	PART NO.	DESCRIPTION
	614 322 9100	ASSY,MECHA,KIT770, MECHANISM ASSY
DM02	614 320 2264	DISC,CHUCK DISC
DM03	614 320 2356	SLIDE,BASE UP/DOWN
DM04	614 323 3923	BELT,SQUARE,LOADING
DM05	614 320 2271	GEAR,LOADING GEAR
DM06	412 061 7803	SPECIAL SCREW,HOLDER RAIL FIX
DM07	614 320 2349	PULLEY,LOADING RETARD PULLY
DM08	614 320 5845	CHASSIS,LOADING CHASSIS
DM09	614 320 2363	TRAY
DM11	411 021 2704	SCR S-TPG BIN 2.6X6, PWB MECHA IF FIX
DM12	645 032 4352	ASSY,MOTOR LOADING
DM13	645 051 4920	MAGNET(CHUCK)
DM14	614 320 2288	HOLDER,CHUCK HOLDER
DM17	411 021 1806	SCR S-TPG BIN 2.6X10,BASE FIX
DM18	411 092 0906	WASHER Z 2.6X10X0.5,BASE FIX
DM19	614 321 0634	ASSY,MECHA,KIT 700 BASE, BASE MECHA
DM20	411 184 0302	SCR S-TPG PAN PCS 1.7X4.5, RACK FIX
DM21	614 310 2083	GEAR,RACK,MOVE PICKUP(FREE)
DM22	614 310 6159	SPRING,COMP, FOR BACK RUSH(RACK)
DM23	614 310 2076	GEAR,RACK,MOVE PICKUP(FIX)
DM24	411 018 4704	SCR PAN PCS 1.7X5,LIMIT SW FIX
DM25	645 040 9899	SWITCH,MICRO 1P-2T,LIMIT SW
DM26	412 057 8304	SPECIAL WASHER,FOR GEAR 4 FIX
DM27	614 310 2069	GEAR,GEAR-5
DM28	614 310 6142	SPRING,COMP,FOR BACK RUSH
DM29	614 310 2052	GEAR.,GEAR-4
DM30	412 057 8304	SPECIAL WASHER,FOR GEAR 2 FIX
DM32	614 310 2038	GEAR.,GEAR-2
DM33	411 106 7709	SCR PAN PCS 1.7X2.5, SLED MOTOR FIX
DM34	645 051 5194	ASSY,MOTOR,SLED MOTOR
DM36	614 310 2045	GEAR.,GEAR-3
DM37	614 320 2301	MOUNTING,BASE MECHA MOUNTING
DM38	614 310 6128	SPACER,MECHA, BASE MECHA FLOATING
DM39	614 322 9070	SPACER,MECHA, BASE MECHA FLOATING

MECHA SW P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
DM10	614 320 2219	ASSY,PWB MECHA SW, MOTOR & SW PWB(Only initial)
CN001	645 006 0922	PLUG,5P,MOTOR & SW PLUG
or	614 310 2618	PLUG,5P,MOTOR & SW PLUG
S0001	645 051 5378	SWITCH,LEVER,MECHA SW

IC BLOCK DIAGRAM & DESCRIPTION

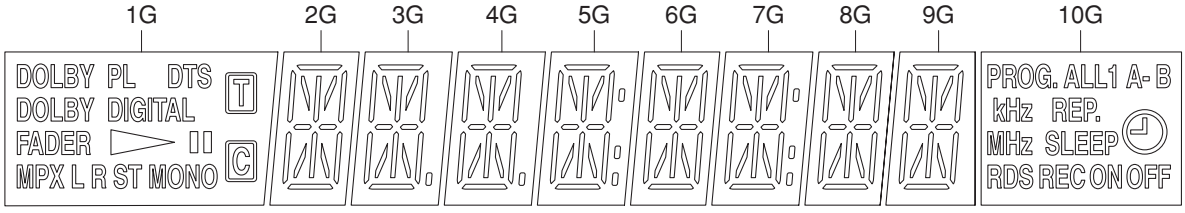
FL601 Fluorecent Tube

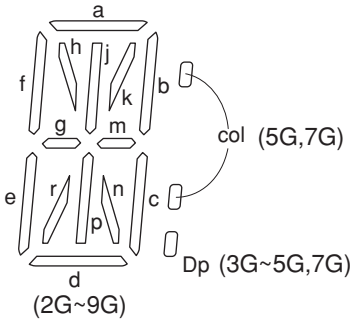


PIN CONNECTION

PIN NO.	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
CONNECTION	F2	F2	NP	NP	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	NX	NX	NX	NX	NX	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	NP	NP	F1	F1

NOTE 1) F1,F2 ------ Filament
2) NP ---------- No pin
3) NX ---------- No extent pin
4) DL ---------- Datum Line
5) 1G~10G --- Grid





ANODE CONNECTION

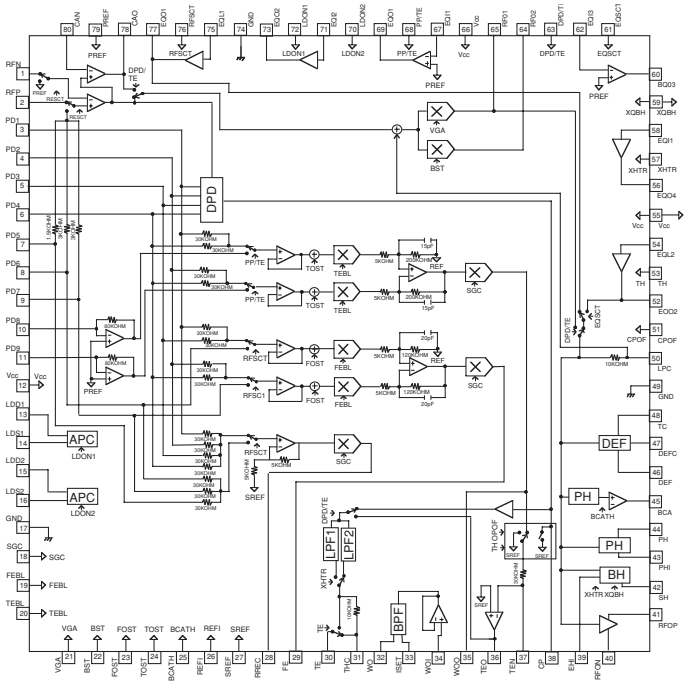
	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G
P1	DOLBY PL	a	a	a	a	a	a	a	a	PROG.
P2	DTS	b	b	b	b	b	b	b	b	ALL
P3	DOLBY DIGITAL	h	h	h	h	h	h	h	h	1
P4	FADER	j	j	j	j	j	j	j	j	A-
P5	▷	k	k	k	k	k	k	k	k	B
P6	▯▯	f	f	f	f	f	f	f	f	REP.
P7	MPX	g	g	g	g	g	g	g	g	kHz
P8	L	m	m	m	m	m	m	m	m	MHz
P9	R	c	c	c	c	c	c	c	c	RDS
P10	ST	r	r	r	r	r	r	r	r	REC
P11	MONO	p	p	p	p	p	p	p	p	SLEEP
P12	T	n	n	n	n	n	n	n	n	◴
P13	C	e	e	e	e	e	e	e	e	ON
P14	-	d	d	d	d	d	d	d	d	OFF
P15	-	-	-	-	col	-	col	-	-	-
P16	-	-	Dp	Dp	Dp	-	Dp	-	-	-

IC BLOCK DIAGRAM & DESCRIPTION

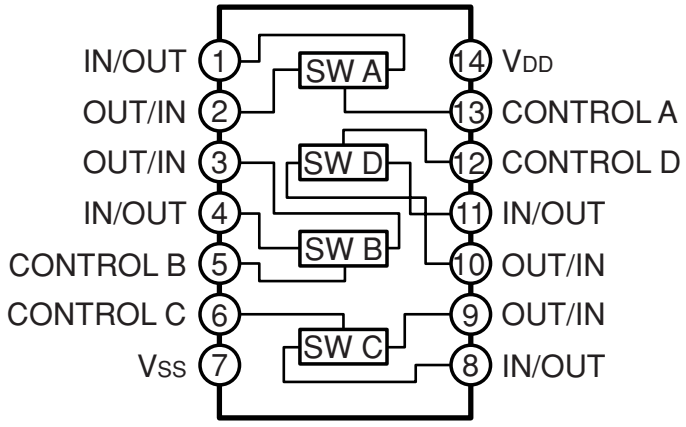
IC100 LA9702WL-MPB (Read Channel)

Pin No.	Pin name	Function
1	RFN	RF signal - input
2	RFP	RF signal + input
3	PD1	Pickup signal input
4	PD2	Pickup signal input
5	PD3	Pickup signal input
6	PD4	Pickup signal input
7	PD5	Pickup signal input
8	PD6	Pickup signal input
9	PD7	Pickup signal input
10	PD8	Pickup signal input
11	PD9	Pickup signal input
12	VCC	Power supply
13	LDD1	APC1 output
14	LDS1	APC1 moniter power input
15	LDD2	APC2 output
16	LDS2	APC2 moniter power input
17	GND	GND
18	SGC	Servo gain control terminal(RREC, FE, TE)
19	FEBL	Focus balance adjustment terminal
20	TEBL	Tracking balance adjustment terminal
21	VGA	RF gain adjustment terminal
22	BST	Equalizer boost adjustment
23	FOST	Focus offset adjustment terminal
24	TOST	Tracking offset adjustment terminal
25	BCATH	BCA shureshud adjustment terminal
26	REFI	Base power setting
27	SREF	Servo signal base power output
28	RREC	Reflection output
29	FE	Focus error output
30	TE	Tracking error output
31	THC	TE hold time constant value condenser connect
32	WO	Warble output terminal
33	ISET	BPF center frequency setting register connect terminal
34	WOI	Push pull signal input
35	WOO	Push pull signal output
36	TEO	3 beam TE gain setting terminal
37	TEN	3 beam TE gain setting terminal
38	CP	Charge pump gain setting register, condenser connect terminal
39	BHI	Bottom hold detect constant setting register connection terminal
40	RFON	RF - output
41	RFOP	RF + output
42	BH	RF bottom ditection output
43	PHI	peak hold ditection constant register connect
44	PH	RF peak detection output
45	BCA	BCA output

Pin No.	Pin name	Function
46	DEF	Defect output (H : Defect detection)
47	DEFC	Defect detection condenser connect terminal
48	TC	Defect detection constant setting register terminal
49	GND	GND (DTD system)
50	LPC	RF DC servo condenser connect terminal
51	CPOF	Charge pump OFF terminal (H : OFF)
52	EQO2	RF equalizer setting terminal
53	TH	Tracking hold (H : hold)
54	EQL2	RF equalizer setting terminal
55	VCC	Power supply (DPD system)
56	EQO4	RF equalizer setting terminal
57	XHTR	Tracking, bottom detection band switching (L : high band)
58	EQI4	RF qualizer setting terminal
59	XQBH	Bottom detection time constant switching (L : high speed)
60	EQ03	RF equalizer setting terminal
61	EQSCT	Equalizer switching (H : 77 pin select, L : 52pin select)
62	EQI3	RF equalizer setting terminal
63	DPD/TE	DPD, 3 beam tracking switching (H : DPD)
64	RFO2	RF output
65	RFO1	RF output
66	VCC	Power supply (RF system)
67	EQI1	RF equalizer setting terminal
68	PP/TE	3 beam, push pull tracking switching (L : 3 beam)
69	EQO1	RF equalizer setting terminal
70	LDON2	APC 2 beam laser ON terminal (H : ON)
71	EQI2	RF equalizer setting terminal
72	LDON1	APC 1 beam laser ON terminal (H : ON)
73	EQO2	RF equalizer setting terminal
74	GND	GND (RF system)
75	EQL1	RF equalizer setting terminal
76	RFSCT	RF input switching (H : RF differential input, PP error)
77	EQO1	RF equalizer setting terminal
78	CAO	customize amp. output
79	PREF	Base voltage output (pick use)
80	CAN	customize amp. input

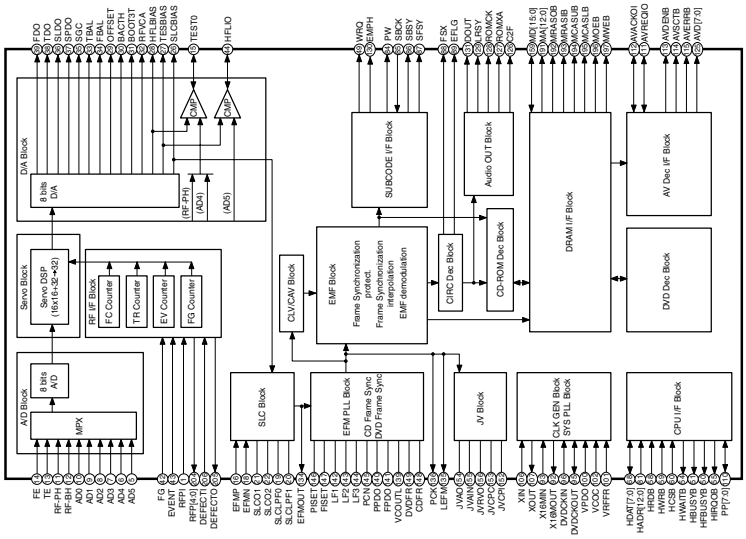


IC101,493 CD40668BCM(Quad Bilateral Switch)



IC BLOCK DIAGRAM & DESCRIPTION

IC130 LC78661W-D(DVD/CD Signal Processing)



Block	Pin #	Pin Name	I/O	Supplementation
RF I/F	1	RFPI	I	RF input port pin
	2	TESIO	I/O	Tracking margin signal I/O pin
Power supply	3	DVDD2	-	A/D D/A internal logic power supply [Digital 5V]
	4	DVSS	-	Digital GND
A/D	5	AD5	I	Servo A/D input pin (AD5: Assistant input 5)
	6	AD4	I	Servo A/D input pin (AD4: Assistant input 4)
	7	AD3	I	Servo A/D input pin (AD3: Assistant input 3)
	8	AD2	I	Servo A/D input pin (AD2: Assistant input 2)
	9	AD1	I	Servo A/D input pin (AD1: Assistant input 1)
	10	AD0	I	Servo A/D input pin (AD0: Assistant input 0)
	11	RF_PH	I	Servo A/D input pin (RF_PH: RF peak hold signal)
	12	RF_BH	I	Servo A/D input pin (RF_BH: RF bottom hold signal)
	13	TE	I	Servo A/D input pin (TE: Tracking error signal)
	14	FE	I	Servo A/D input pin (FE: Focus error signal)
TEST pin	15	TEST0	I	Test input pin 0 (L Fixed)
SLC	16	EFMINP	I	EFM/EFM + input pin
TEST pin	17	TEST1	I	Test input pin 1 (L Fixed)
SLC	18	EFMINN	I	EFM-input pin
	19	SLCLPFO	-	SLC LPF pin
	20	SLCLPFI	-	SLC LPF pin
	21	SLCO1	-	SLC control pin
	22	SLCO2	-	SLC control pin
Power supply	23	AVDD1	-	A/D D/A SLC power supply [Analog 5V]
	24	AVSS	-	Analog GND
D/A	25	VREF	O	Servo D/A standard voltage
	26	SLCBIAS	O	Servo D/A output pin (SLCBIAS: SLC standard voltage signal)
	27	TESBIAS	O	Servo D/A output pin (TESBIAS: TES standard voltage signal)
	28	HFLBIAS	O	Servo D/A output pin (HFLBIAS: HFL standard voltage signal)
	29	OFFSET	O	Servo D/A output pin (OFFSET: Assistant signal)
	30	BCATH	O	Servo D/A output pin (BCATH: Assistant signal)
	31	BOOT3T	O	Servo D/A output pin (BOOT3T: Assistant signal)
	32	RFVCA	O	Servo D/A output pin (RFVCA: Assistant signal)
	33	TBAL	O	Servo D/A output pin (TBAL: Tracking balance control signal)
	34	FBAL	O	Servo D/A output pin (FBAL: Focus balance control signal)
	35	SGC	O	Servo D/A output pin (SGC: Assistant signal)
	36	SLDO	O	Servo D/A output pin (SLDO: Thread control signal)
	37	SPDO	O	Servo D/A output pin (SPDO: Spindle control signal)
	38	TDO	O	Servo D/A output pin (TDO: Tracking control signal)
	39	FDO	O	Servo D/A output pin (FDO: Focus control signal)
Power supply	40	DVSS	-	Digital GND
	41	DVDD0	-	Internal logic power supply [Digital 3.3V]
RF I/F	42	FG	I	FG counter input pin
	43	EVENT	I	EVENT counter input pin
	44	HFLIO	I/O	Mirror detest signal I/O pin
General-purpose port	45	PP0	I/O	General-purpose port 0
	46	PP1	I/O	General-purpose port 1
	47	PP2	I/O	General-purpose port 2
	48	PP3	I/O	General-purpose port 3
Subcode	49	WRQ	O	Subcode Q read ready monitor pin
Microcomputer I/F	50	HFBUSYB	O	DSP command dispose busy signal output pin
	51	HBUSYB	O	DSP command receiver busy signal output pin
Power supply	52	DVDD3	-	I/O power supply [Digital 3.3V or 5V] [42 to 97]
	53	DVSS	-	Digital GND

Block	Pin #	Pin Name	I/O	Supplementation
Microcomputer I/F	54	HWAITB	O	Wait signal output pin
	55	HIRQB	O	Interrupt signal output pin
	56	DVDRESB	I	Decoder reset input pin
	57	RESB	I	Servo reset input pin
	58	HRDB	I	Read signal input pin
	59	HWRB	I	Write signal input pin
	60	HCSB	I	Chip select signal input pin
	61	HDAT0	I/O	Data 0
	62	HDAT1	I/O	Data 1
	63	HDAT2	I/O	Data 2
	64	HDAT3	I/O	Data 3
	65	HDAT4	I/O	Data 4
	66	HDAT5	I/O	Data 5
	67	HDAT6	I/O	Data 6
	68	HDAT7	I/O	Data 7
Microcomputer I/F	69	HADR0	I	Address 0
	70	HADR1	I	Address 1
	71	HADR2	I	Address 2
	72	HADR3	I	Address 3
	73	HADR4	I	Address 4
	74	HADR5	I	Address 5
	75	HADR6	I	Address 6
	76	HADR7	I	Address 7
	77	HADR8	I	Address 8
	78	HADR9	I	Address 9
	79	HADR10	I	Address 10
	80	HADR11	I	Address 11
	81	HADR12	I	Address 12 (Buffer memory access selector pin [MCSB])
Power supply	82	DVDD3	-	I/O power supply [Digital 3.3V or 5V] [42 to 97]
	83	DVSS	-	Digital GND
Subcode	84	PW /MONI0	O	Subcode [P,Q,R,S,T,U,V and W] data output pin / Monitor pin 0
	85	SBCK	I	Subcode data readout shift clock input pin
	86	SBSY	O	Subcode block synchronization signal output pin
	87	SFSY/MONI1	O	Subcode frame synchronization signal output pin / Monitor pin 1
Monitor	88	FSX /MONI2	O	CD1 frame synchronization signal / Monitor pin 2
	89	EFLG/MONI3	O	Error correction C1,C2 correction conditions monitor pins / Monitor pin 3
General-purpose	90	PP4	I/O	General-purpose port 4
	91	PP5	I/O	General-purpose port 5
SYSTEM CLK	92	X16MOUT	O	Internal 16MHz output pin
	93	X16MIN	I	External 16MHz input pin
TEST pin	94	TEST2	I	Test input pin 2 (L Fixed)
SYSTEM CLK	95	DVDCKOUT	O	Internal DVD clock output pin
	96	DVDCKIN	I	External DVD clock input pin
TEST pin	97	TEST3	I	Test input pin 3 (L Fixed)
Power supply	98	DVDD0	-	Internal logic power supply [Digital 3.3V]
	99	DVSS	-	Digital GND
SYSTEM CLK	100	VPDO	-	SYSTEM PLL filter connection pin
	101	VRPFR	-	SYSTEM PLL VCO oscillator range adjustment pin
	102	VCOC	-	SYSTEM PLL filter connection pin
Power supply	103	AVSS	-	Analog GND
	104	AVDD3	-	SYSTEM VCO power supply [Analog 3.3V]
Power supply	105	DVSS	-	Digital GND
SYSTEM CLK	106	XIN	I	Oscillator circuit input pin
	107	XOUT	O	Oscillator circuit output pin
Power supply	108	DVDD6	-	Oscillator circuit power supply [Digital 3.3V]
General-purpose	109	PP6	I/O	General-purpose port 6
	110	PP7	I/O	General-purpose port 7

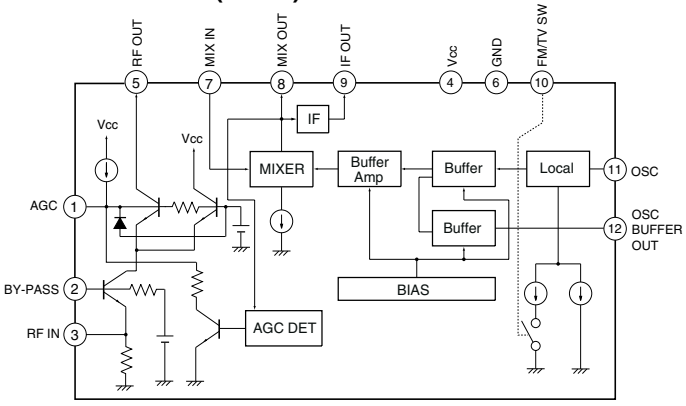
IC BLOCK DIAGRAM & DESCRIPTION

IC130 LC78661W-D(DVD/CD Signal Processing)

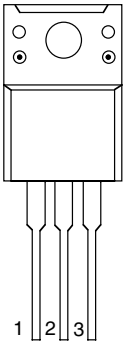
Block	Pin #	Pin Name	I/O	Supplementation
AV data I/F	111	AVREQIO	I/O	AV data demand flag I/O pins
	112	AVACKOI	I/O	AV data read strobe output pin
	113	AVDACK	O	AV data read (Clock /Enable) output pins
	114	AVSCTB	O	AV output sector synchronization output pin
	115	AVERRB	O	AV data reliable flag output pin
Power supply	116	DVSS	-	Digital GND
	117	DVDD4	-	I/O power supply [Digital 3.3V or 5V] [109 to 136]
AV data I/F	118	AVD0	O	AV data 0
	119	AVD1	O	AV data 1
	120	AVD2	O	AV data 2
	121	AVD3	O	AV data 3
	122	AVD4	O	AV data 4
	123	AVD5	O	AV data 5
	124	AVD6	O	AV data 6
	125	AVD7	O	AV data 7
CD data	126	C2F	O	C2 flag output pin
	127	ROMXA	O	CD data output pin
	128	ROMCK	O	CD data output shift lock output pin
	129	LRSY	O	CD data output L/R clock output pin
	130	EMPH	O	Deemphasis monitor pin
Digital OUT	131	DOUT	O	Audio EIAJ data output pin
Power supply	132	DVDD4	-	I/O power supply [Digital 3.3V or 5V] [109 to 136]
	133	DVSS	-	Digital GND
SLC	134	EFMOUT	O	EFM 2 value signal output pin
EFM PLL	135	LEFM	O	Output pin for the signal picked out from EFM binary signal with PCK
	136	PCK	O	EFM playback shift clock output pin
Power supply	137	DVDD0	-	Inner logic power supply [Digital 3.3V]
	138	DVSS	-	Digital GND
EFM PLL	139	VCOCTL	-	VCO filter connection pin
	140	PPDO	-	Phase comparison filter connection pin
	141	FPDO	-	Frequency comparison filter connection pin
	142	LF1	-	Filter connection pin 1
	143	LF2	-	Filter connection pin 2
	144	LF3	-	Filter connection pin 3
	145	PCN	-	Voltage monitor pin (Phase comparison charge pomp PCH control voltage)
	146	PISET	-	Current setting pin for the constant-current phase comparison charge pump
	147	FISET	-	Current setting pin for the constant-current frequency comparison charge pump
	148	CDFR	-	EFM playback VCO oscillator range setting pin [F or CD]
	149	DVDFR	-	EFM playback VCO oscillator range setting pin [F or DVD]
Power supply	150	AVDD2	-	EFM PLL JV power supply [Analog 5V]
	151	AVSS	-	Analog GND
JV	152	JVCPI	-	JV control pin
	153	JVCPC	-	JV control pin
	154	JVAO	O	EFM playback PLL clock jitter output pin
	155	JVAIN	-	JV control pin
	156	JVRVO	-	JV control pin
Power supply	157	AVDD4	-	SYSTEM PLL power supply [Analog 3.3V]
	158	AVSS	-	Analog GND
DRAM I/F	159	MD15	I/O	DRAM data 15
	160	MD14	I/O	DRAM data 14
	161	MD13	I/O	DRAM data 13
	162	MD12	I/O	DRAM data 12
	163	MD11	I/O	DRAM data 11
	164	MD10	I/O	DRAM data 10
	165	MD9	I/O	DRAM data 9
	166	MD8	I/O	DRAM data 8

Block	Pin #	Pin Name	I/O	Supplementation
Power supply	167	DVDD5	-	I/O power supply [Digital 3.3V or 5V] [159 to 197]
	168	DVSS	-	Digital GND
DRAM I/F	169	MD7	I/O	DRAM data 7
	170	MD6	I/O	DRAM data 6
	171	MD5	I/O	DRAM data 5
	172	MD4	I/O	DRAM data 4
	173	MD3	I/O	DRAM data 3
	174	MD2	I/O	DRAM data 2
	175	MD1	I/O	DRAM data 1
	176	MD0	I/O	DRAM data 0
DRAM I/F	177	MA0	O	DRAM address 0
	178	MA1	O	DRAM address 1
	179	MA2	O	DRAM address 2
	180	MA3	O	DRAM address 3
	181	MA4	O	DRAM address 4
	182	MA5	O	DRAM address 5
	183	MA6	O	DRAM address 6
	184	MA7	O	DRAM address 7
Power supply	185	DVDD5	-	I/O power supply [Digital 3.3V or 5V] [159 to 197]
	186	DVSS	-	Digital GND
DRAM I/F	187	MA8	O	DRAM address 8
	188	MA9	O	DRAM address 9
	189	MA10	O	DRAM address 10
	190	MA11	O	DRAM address 11
	191	MA12	O	DRAM address 12
	192	MRAS0B	O	RAS output pin 0
	193	MRAS1B	O	RAS output pin 1
	194	MCASUB	O	CAS output pin (Upper Byte)
	195	MCASLB	O	CAS output pin (Lower Byte)
	196	MOEB	O	OE output pin
	197	MWEB	O	WE output pin
Power supply	198	DVSS	-	Digital GND
	199	DVDD0	-	Inner logic power supply [Digital 3.3V]
	200	RFP0	O	RF general-purpose port output pin 0
	201	RFP1	O	RF general-purpose port output pin 1
	202	RFP2	O	RF general-purpose port output pin 2
	203	RFP3	O	RF general-purpose port output pin 3
	204	RFP4	O	RF general-purpose port output pin 4
	205	DEFECTO	O	Defect signal output pin
	206	DEFECTI	I	Defect signal input pin
Power supply	207	DVSS	-	Digital GND
	208	DVDD1	-	I/O power supply [Digital 3.3V or 5V] [1 to 2, 200 to 206]

IC211 TA8176SN(Mixer)



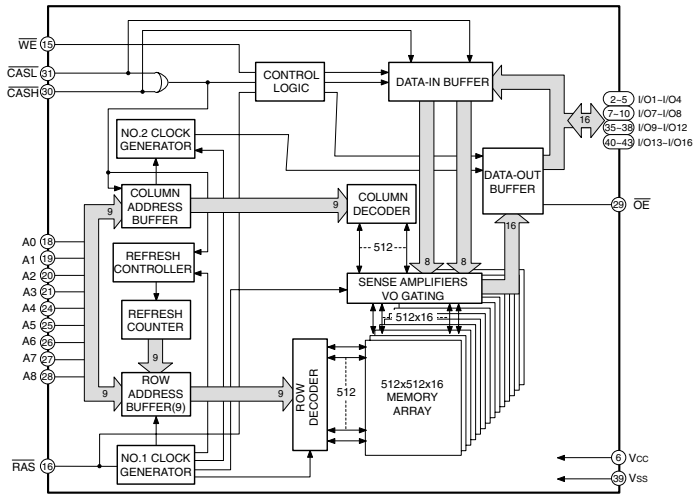
IC401 KIA7805API(Regulator)

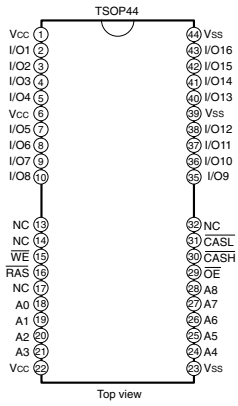


1. INPUT
2. COMMON
3. OUTPUT

IC BLOCK DIAGRAM & DESCRIPTION

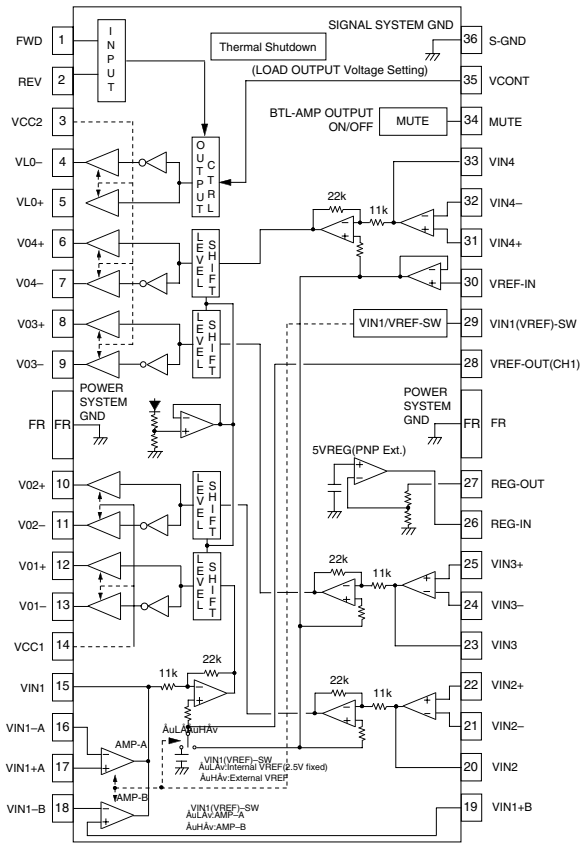
IC141 T224162B-35S(DRAM)



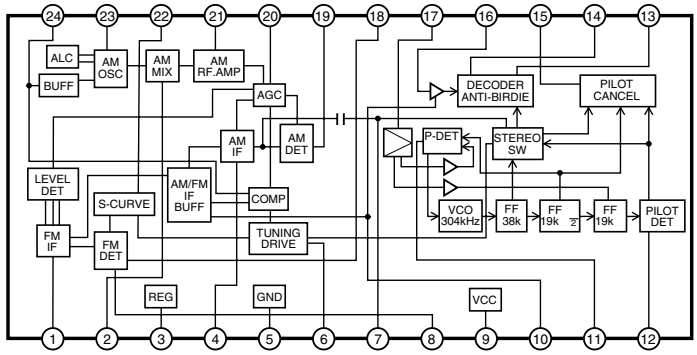


PIN NO.	SYM.	TYPE	DESCRIPTION
16~19,22~26	A0~A8	Input	Address Input
14	$\overline{RAS}$	Input	Row Address Strobe
28	$\overline{CASH}$	Input	Column Address Stlobe /Upper Byte Control
29	$\overline{CASL}$	Input	Column Address Stlobe /Lower Byte Control
13	$\overline{WE}$	Input	Write Enable
27	$\overline{OE}$	Input	Output Enable
2-5,6~10,31~34,36~39	I/O1-I/O16	Input/Output	Data Input /Output
1,6,20	Vcc	Supply	Power, 5V
21,35,40	Vss	Ground	Ground
11,12,15,30	NC	-	No Connec

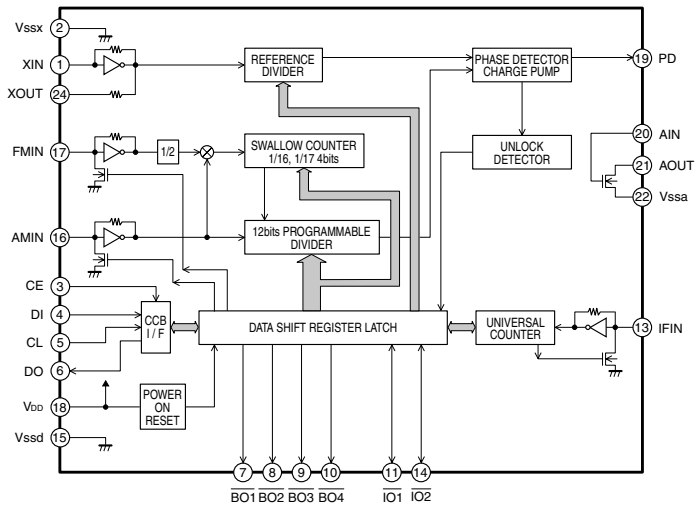
IC160 LA6560(Motor Driverl)



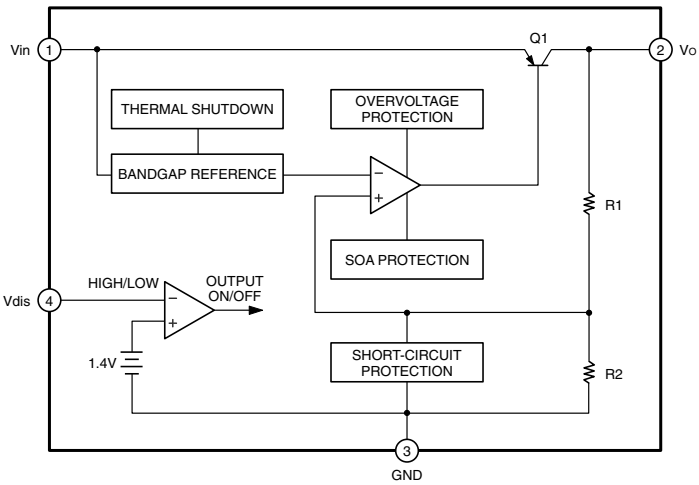
IC231 LA1844ML(AM/FM-IF/MPX)



IC241 LC72121M-D(PLL)

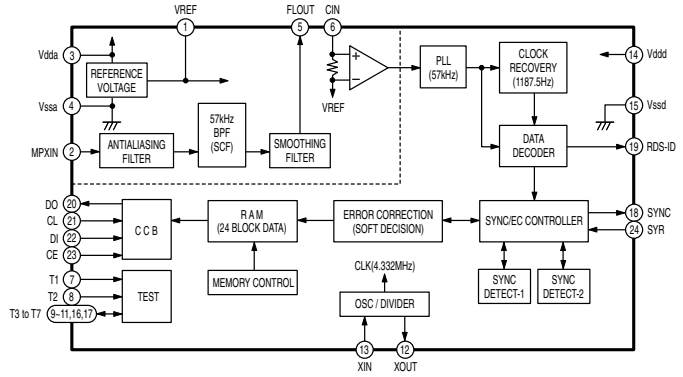


IC402 KA78R12STU(Low Dropout Voltage Regulator)



IC BLOCK DIAGRAM & DESCRIPTION

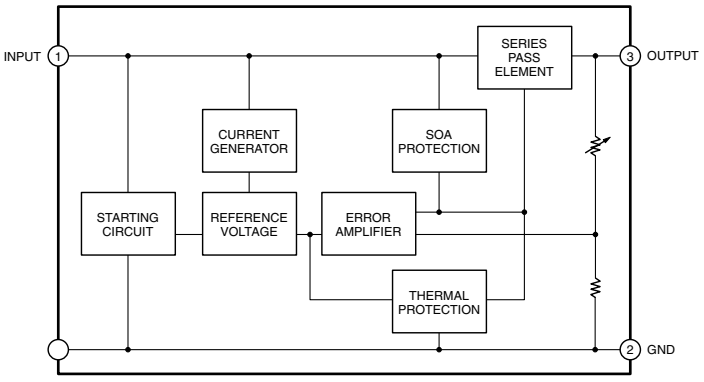
IC251 LC72722(RDS Signal Processer)



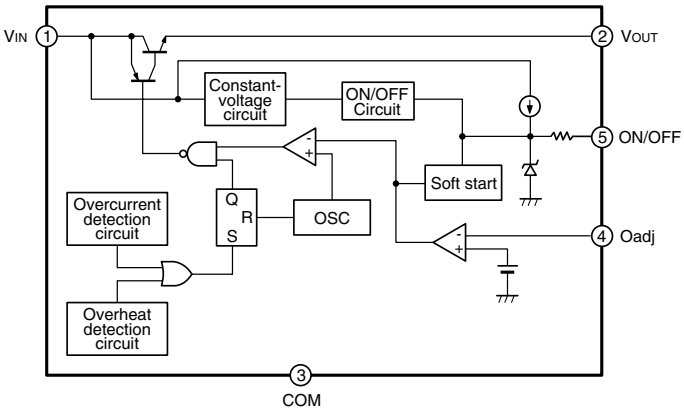
Pin No.	Pin name	Function	I/O
1	VREF	Reference voltage output (Vdda/2)	O
2	MPXIN	Baseband (multiplexed) signal input	I
5	FLOUT	Subcarrier oitput (filter output)	O
6	CIN	Subcarrier input (comparator input)	I
3	Vdda	Analog power supply (+5V)	-
4	Vssa	Analog ground	-
12	XOUT	Crystal oscillator output (4.332/8.664MHz)	O
13	XIN	Crystal oscillator input (external reference signal input)	I
7	T1	Test input (This pin must always be connected to ground.)	
8	T2	Test input (standby control) 0:Normal operation. 1:Standby state (crystal oscillator stopped)	
9	T3 (RDCL)	Test I/O (RDS clock output)	I/O*
10	T4 (RDDA)	Test I/O (RDS data output)	
11	T5 (RSFT)	Test I/O (soft decision control data output)	
16	T6 (ERROR/57K/TP/BE1)	Test I/O (error status, regenceratcd carrier, TP, error block count outputs)	
17	T7 (CORREC/ARI-ID/TA/BEO)	Test I/O (error corrcction status, SK datection,TA, error block count outputs)	
18	SYNC	Block synchronization output	
19	RDS-ID	RDS datection	O
20	DO	Data output	
21	CL	Clock input — Serial data interface (CCB)	I
22	DI	Data input — Serial data interface (CCB)	
23	CE	Chip enable — Serial data interface (CCB)	
24	SYR	Synchronization and RAM address reset (active high)	
14	Vddd	Digital power supply (+5V)	-
15	Vssd	Digital ground	-

* Normally the output pin. Used as an I/O pin in test mode, which is not available to user applications.

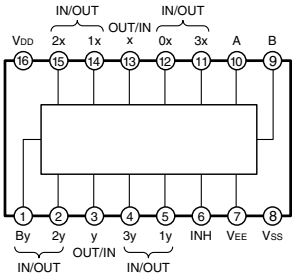
IC412 KA7805R(Voltage Regulator)



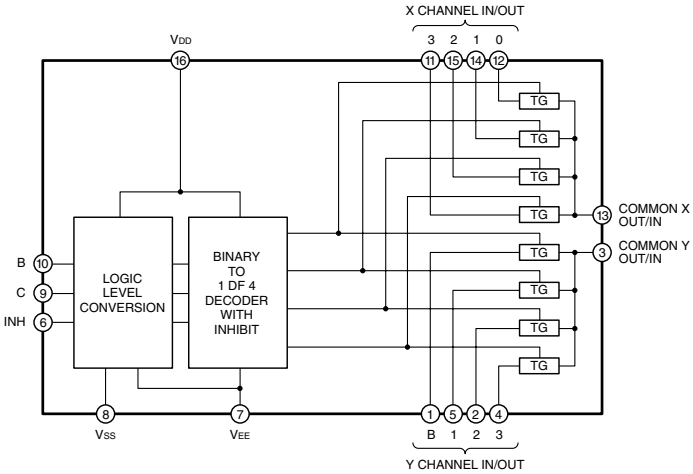
IC410,411 PQ1CG21H2RZ(Chopper Regulator)



IC450 CD4052BCM(Analog Mulutiplexer/ Demoltiplexer)

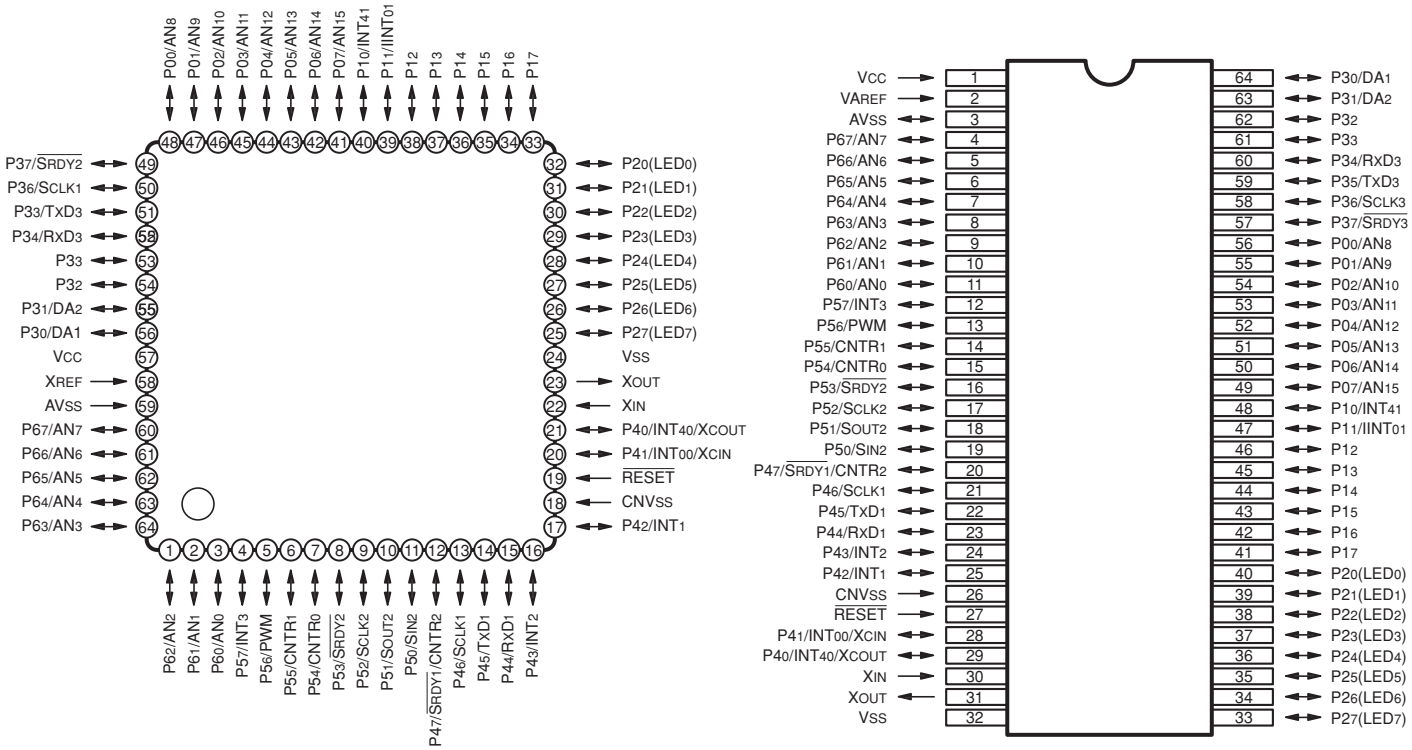


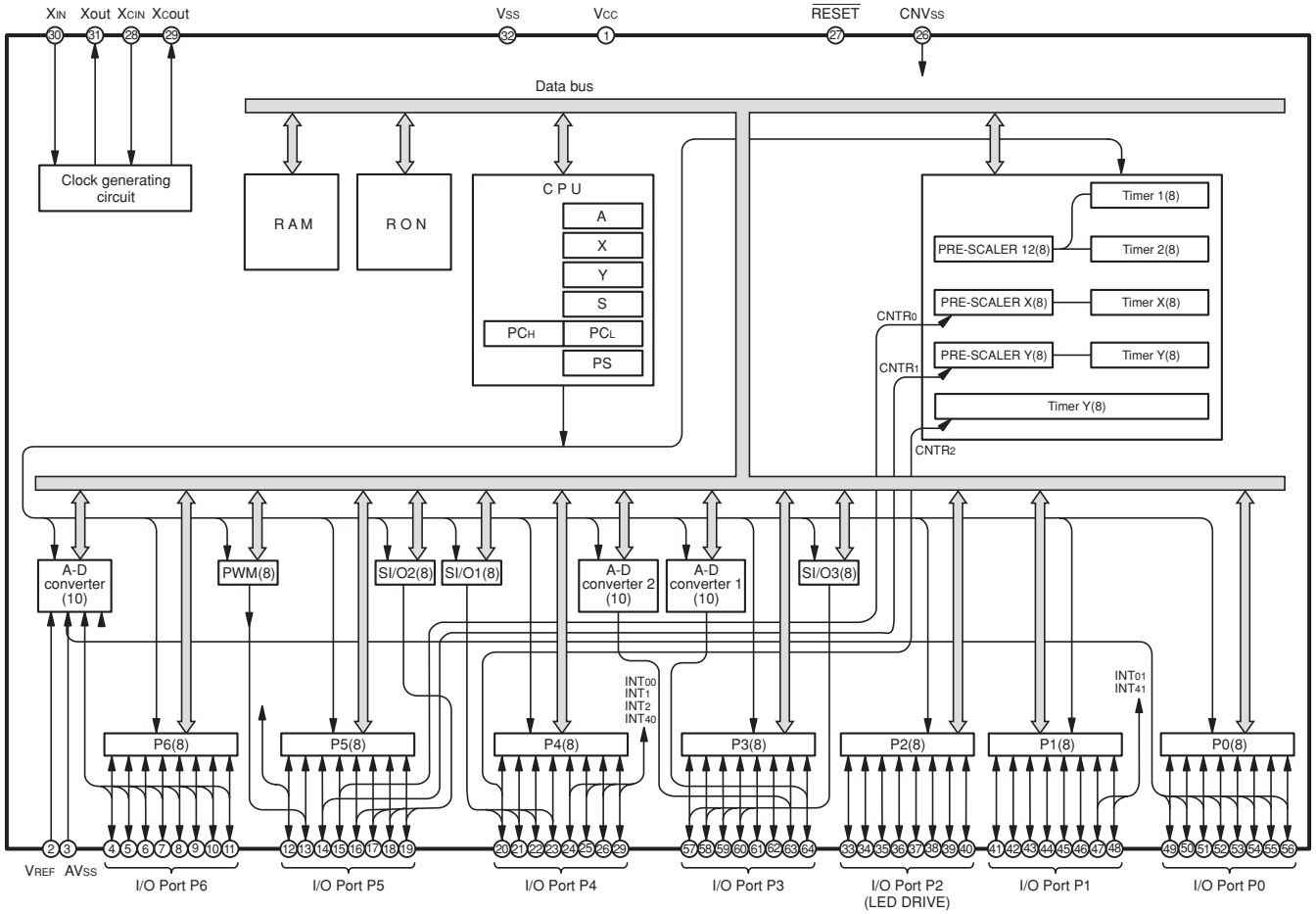
INPUT STATES				"ON" CHANNELS
INHIBIT	C	B	A	CD4052B
0	0	0	0	0X, 0Y
0	0	0	1	1X, 1Y
0	0	1	0	2X, 2Y
0	0	1	1	3X, 3Y
0	1	0	0	
0	1	0	1	
0	1	1	0	
0	1	1	1	
1	-	-	-	NONE



IC BLOCK DIAGRAM & DESCRIPTION

IC430 M38039MC-07FP(Single Chip 8-Bits Microcomputer)





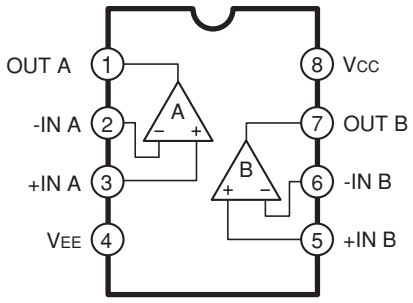
IC BLOCK DIAGRAM & DESCRIPTION

IC430 M38039MC-07FP(Single Chip 8-Bits Microcomputer)

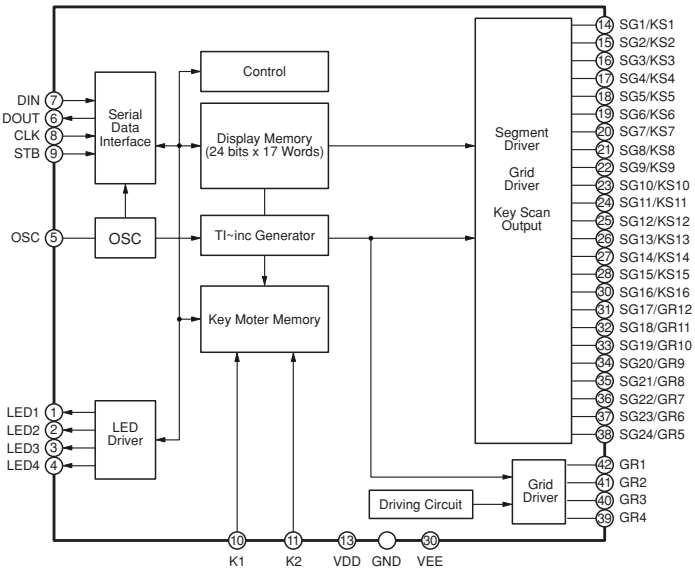
PIN NAME	DESCRIPTION	FANCTION	OTHER FUNCTION
VCC,VSS	Power source input	Impressed 2.7~5.5V to Vcc and 0V to Vss.	
CNVSS	CNVSS	Controled mode of operation. Connect to Vss.	
VREF	Voltage reference input	For A-D Converter and voltage reference.	
AVSS	Analog power source input	For A-D converter and analog power source input. Connect to Vss.	
$\overline{\text{RESET}}$	Reset input	For active "L" reset.	
XIN	Clock onput	Clock generation I/O. Connect ceramic resonator or crystal oscillator between XIN and XOUT. Connect	
XOUT	Clock output	clock generator to XIN when outer clock used and XOUT is open. Feedback resistance is internal.	
P00/AN8~ P07/AN15	I/O Port P0	8 bit I/O port. Possible appointment of I/O, bit unit. Output formal is CMOS3 state.	A-D Converter in
P10/INT01 P11/INT41	I/O Port P1	Possible pullup control, bit unit. P20~P27 : Possible large current for LED drive.	Interruption in
P12~P17			
P20~P27	I/O Port P2		
P30/DA1 P31/DA2	I/O Port P3	8 bit I/O port. Possible appointment of I/O, bit unit. Input level is CMOS input level.	D-A Converter out
P32,P33		Output formal are CMOS3 state of P30,P31,P34~P37.	
P34/RxD3 P35/TxD3 P36/$\overline{\text{SCLK3}}$ P37/$\overline{\text{SRDY3}}$		Output formal are channel oper drain of P32,P33. Other P32,P33 : Possible pullup control, bit unit.	Serial I/O3
P40/INT40/XCOUT P41/INT00/XCIN P42/INT1	I/O Port P4	8 bit I/O port. Possible appointment of I/O, bit unit. CMOS input level : Output formal is CMOS3 state. Possible pullup control, bit unit.	Interruption in Sub-clock generation I/O (Connected resonator)
P43/INT2 P44/RxD1			Interruotion in
P45/TxD1 P46/SCLK1			Serial I/O1
P47/$\overline{\text{SRDY1}}$/CNTR2			Serial I/O1, timer Z
P50/SIN2 P51/SOUT2 P52/SCLK2 P53/$\overline{\text{SRDY2}}$	I/O Port P5	8 bit I/O port. Possible appointment of I/O, bit unit. CMOS input level : Output formal is CMOS3 state. Possible pullup control, bit unit.	Serial I/O2
P54/CNTR0			Timer X
P55/CNTR1			Timer Y
P56/PWM			DWM out
P57/INT3			Interruption in
P60/AN0~ P67/AN7	I/O Port P6		A-D Converter in

IC BLOCK DIAGRAM & DESCRIPTION

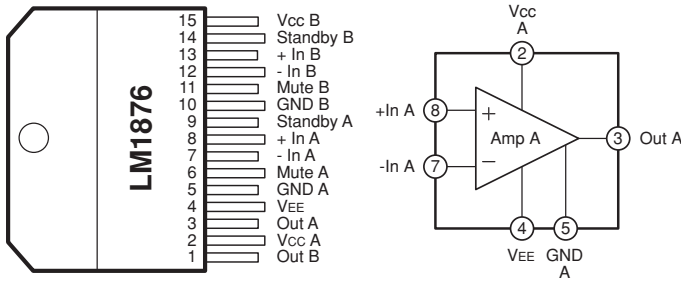
IC460,461,470,471,480,481,490,495 KIA4558F, NJM4558M(Dual Low Noise Operational Amplifier)



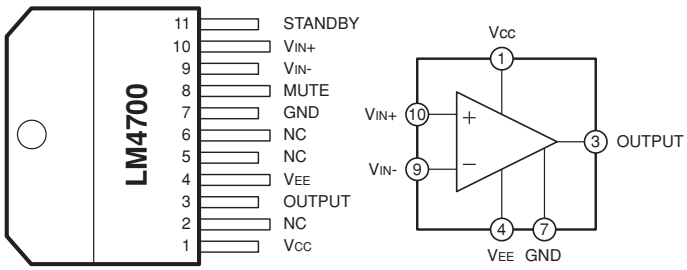
IC601 PT6315 (VFD Driver/Controller)



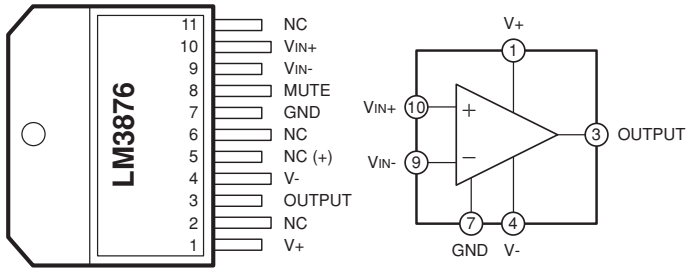
IC462,472 LM1876 (Dual 20W audio Power Amplifier)



IC482 LM4700TF (30w audio Power Amplifier)

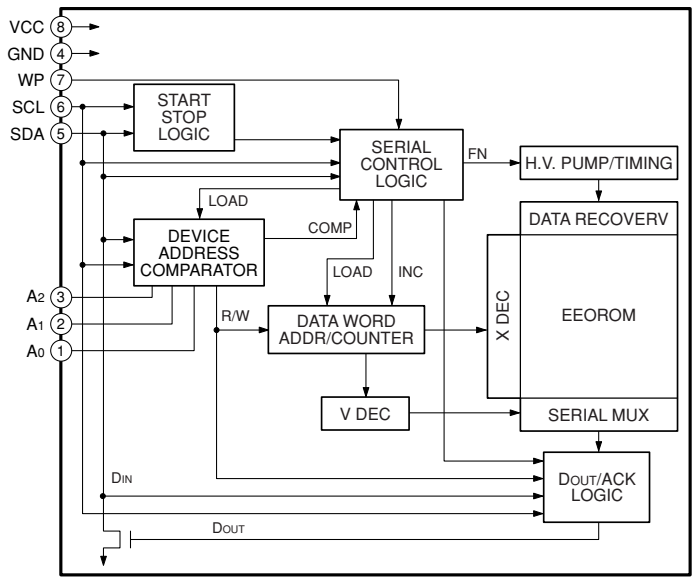


IC483 LM3876TF (56w audio Power Amplifier)



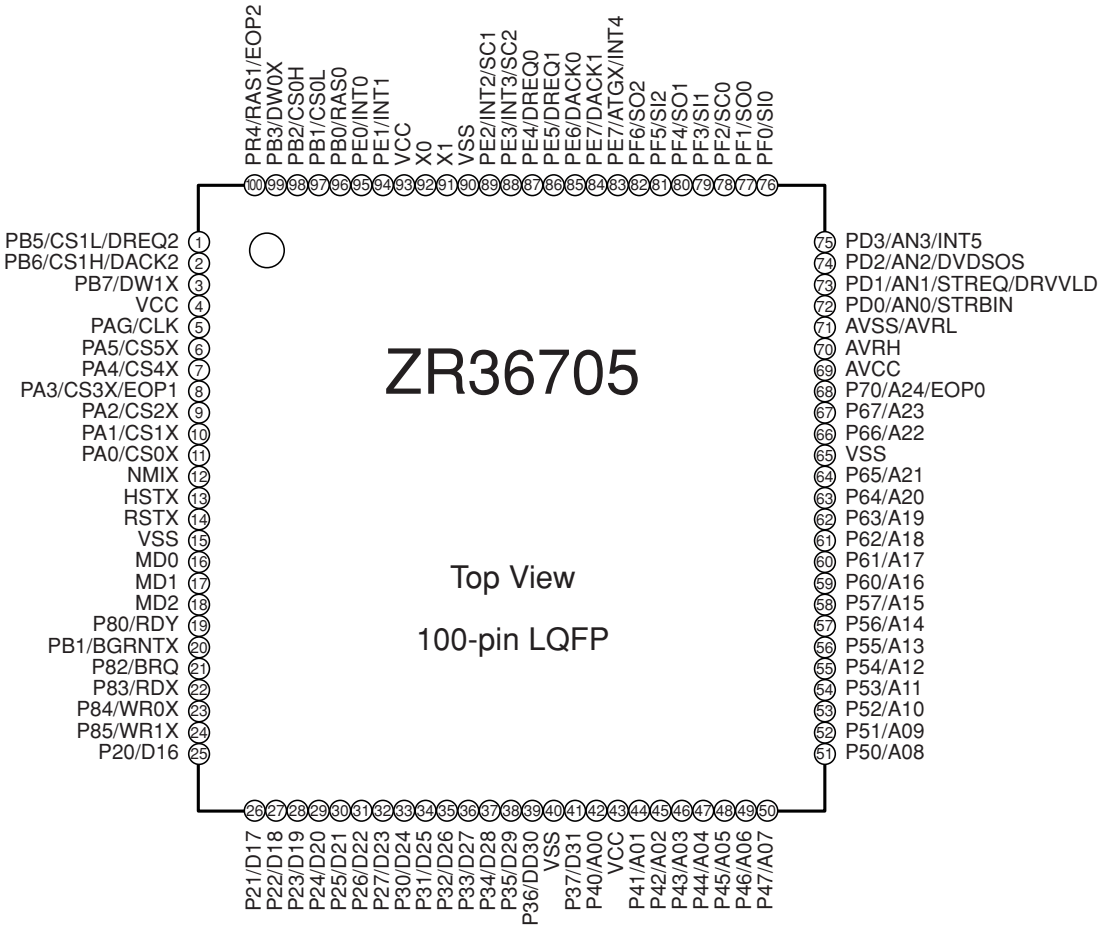
Pin Name	I/O	Description	Pin No.
LED1 to LED4	O	LED Output Pin	1 to 4
OSC	I	Oscillator Input Pin A resistor is connected to this pin to determinc the oscillation frequency	5
DOUT	O	Data Output Pin (N-Channel, Open-Drain) This pin outputs scrial data at the falling cdge of the shift clock (starting from the lower bit)	6
DIN (Schmitt Trigger)	I	Data Input Pin This pin inputs serial data at the rising cdge of the shift clock (starting from the lower bit)	7
CLK (Schmitt Trigger)	I	Clock Input Pin This pin reads serial data at the rising cdge and outputs data at the falling cdge.	8
STB (Schmitt Trigger)	I	Serial Interface Strobe Pin The data input after the STB has fallen is processed as a command. When this pin "HIGH",CLK is ignored,	9
K1 to K2	I	Key Data Input Pins The data inputted to these pins are fatched at the end of the display cycle.	10, 11
VSS	-	Logic Ground Pin	12, 44
VDD	-	Logic Power Supply	13, 43
SG1/KS1 to SG16/KS16	O	High-Voltage Segment Output Pins Also acts as the Key Source	14 to 29
VEE	-	Pull-Down Level	30
SG17/GR12 to SG24/GR5	O	High Voltage Segment/Grid Output Pins	31 to 38
GR4 to GR1	O	High-Voltage Grid Output Pins	39 to 42

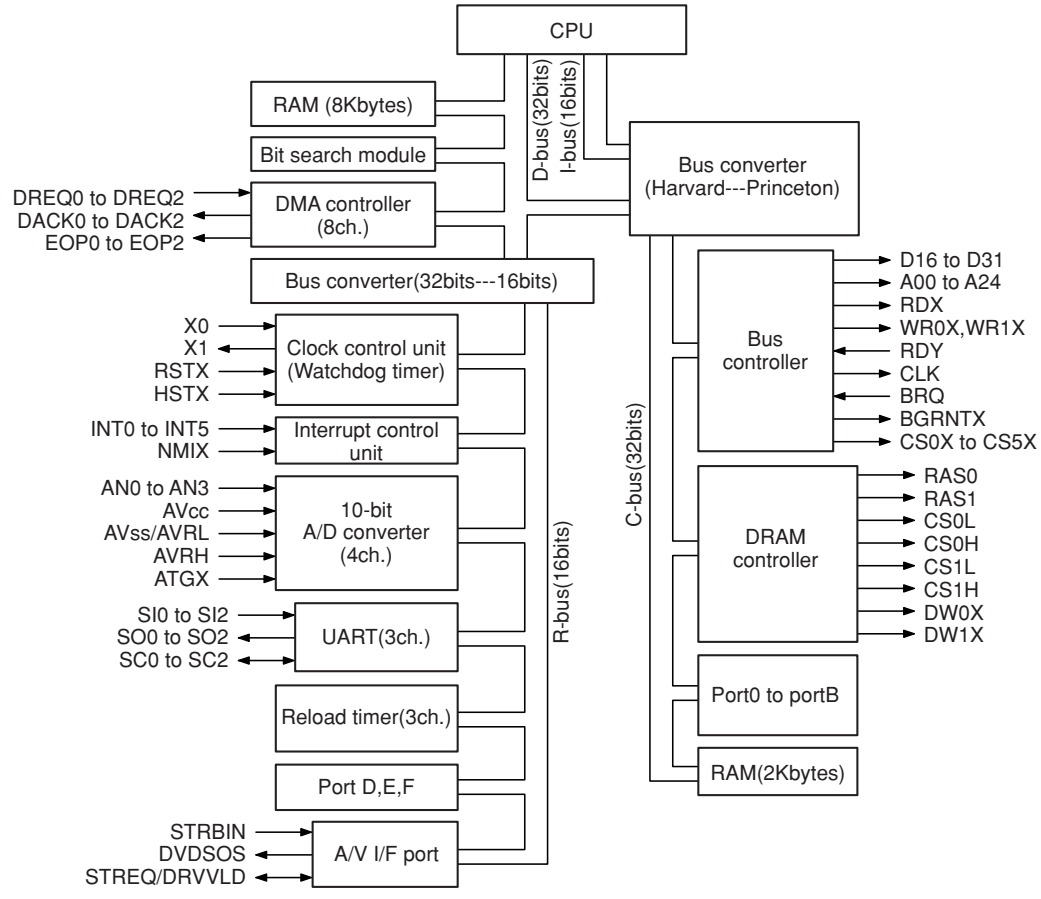
IC801 AT24C02N-10SI-2.7 (EEPROM)



IC BLOCK DIAGRAM & DESCRIPTION

IC800 ZR36705TQC (Micro Controller)





IC BLOCK DIAGRAM & DESCRIPTION

IC800 ZR36705TQC (Micro Controller)

Pin Number	Pin Name	I/O Circuit Format	Function
25 26 27 28 29 30 31 32	D16/P20 D17/P21 D18/P22 D19/P23 D20/P24 D21/P25 D22/P26 D23/P27	E	Bits 16 to 23 of external data bus. When the external bus width is set to 8 bits, these pins can be used as general-purpose I/O ports (P20 to P27).
33 34 35 36 37 38 39 41	D24/P30 D25/P31 D26/P32 D27/P33 D28/P34 D29/P35 D30/P36 D31/P37	E	Bits 24 to 31 of external data bus. Whten these pins are not used for the data bus,they can be used as general-purpose I/O ports (P30 to P37).
42 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58	A00/P40 A01/P41 A02/P42 A03/P43 A04/P44 A05/P45 A06/P46 A07/P47 A08/P50 A09/P51 A10/P52 A11/P53 A12/P54 A13/P55 A14/P56 A15/P57	F	Bits 00 to 15 of external address bus. When these pins are not used for the address bus,they can be used as general-purpose I/O ports (P40 to P47 and P50 to P57).
59 60 61 62 63 64 66 67	A16/P60 A17/P61 A18/P62 A19/P63 A20/P64 A21/P65 A22/P66 A23/P67	F	Bits 16 to 23 of external address bus. When these pins are not used for the address bus, they can be used as general-purpose I/O ports (P60 to P67).
68	A24/P70/EOP0	F	Bits 24 of external address bus. [EOP0] DMAC EOP output (ch 0). This function is valid when DMAC EOP output is enabled. [P70] When this pin is not used as A24 and EOP0, the pin can be used as a general-purpose I/O port.
89	INT2/SC1/PE2	F	[INT2] Input of external interrupt request. This input is used from time to time while the corresponding external interrupt is enabled. Therefore, it is needed to stop output by other functions exceptwhen such output is performed intentionally. [SC1] UART1 clock I/O. Clock output can be used when UART1 clock output is enabled. [PE2] General-purpose I/O port. This function is valid when UART1 clock output is disabled.
88	INT3/SC2/PE3	F	[INT3] Input of external interrupt request. This input is used from time to time while the corresponding external interrupt is enabled. Therefore, it is needed to stop output by other functions except when such output is performed intentionally. [SC2] UART1 clock I/O. Clock output can be used when UART1 clock output is enabled. [PE3] General-purpose I/O port. This function is valid when UART1 clock output is disabled.
87 86	DREQ0/PE4 DREQ1/PE5	F	[DREQ0,1] Input of DMA external transfer request. This input is used from time to time when this pin is selected for the DMAC transfer cause. Therefore, it is needed to stop output by other functions except when such output is performed intentionally. [PE4,5] General-purpose I/O ports.
85	DACK0/PE6	F	[DACK0] Output of DMAC external transfer request acceptance (ch 0). This function is valid the output of DMAC transfer request acceptance is enabled. [PE6] General-purpose I/O port. This function is valid when thr output of DMAC transfer request scceptance or DACK0 output is disabled.
84	DACK1/PE7	F	[DACK1] Output of DMAC external transfer request acceptance (ch 0). This function is valid when the output of DMAC transfer request acceptance is enabled. [PE7] General-purpose I/O port. This function is valid when the output of DMAC transfer request acceptance or DACK0 output is disabled.
76	S10/PE0	F	[S10] UART0 data input. This input used from time to time while input operation is selected. Therefore, it is needed to stop output by other functions except when such output is performed intentionally. [PF0] General-purpose I/O port.
77	SO0/PF1	F	[SO0] UART0 data output. This function is valid when UART0 data output is enabled. [PF1] General-purpose I/O port. This function is valid when UART0 data output is disabled.

IC BLOCK DIAGRAM & DESCRIPTION

IC800 ZR36705TQC (Micro Controller)

Pin Number	Pin Name	I/O Circuit Format	Function
19	RDY/P80	E	External Ready input, 0 is input when the bus cycle being executed is not completed. When the pin is not used for this purpose, it can be used as a general-purpose I/O port.
20	BGRNTX/P81	F	Output of external bus release acceptance. L is output when the external bus has been released. When the pin is not used for this purpose, it can be used as a general-purpose I/O port.
21	BRQ/P82	E	Input of external bus release request. 1 is input to request that the external bus be released. When the pin is not used for this purpose, it can be used as a general-purpose I/O port.
22	RDX/P83	F	External bus read strobe. When this pin is not used for this purpose, it can be used as general-purpose I/O port.
23 24	WR0X/P84 WR1X/P85	F	External bus write strobes. Individual control signals and data bus byte positions have the following relationships. For 16-bit bus width: WR0X strobes D15:D08 WR1X strobes D07:D00 For 8-bit bus width: WR0X strobes D15:D08 WR1 used as P85 Note: WR1X is Hi-Z while it is in reset stata. When it is used asa 16-bit bus, attach a pull-up resistor to the outside. [P84 or P85] When WR0X or WR1X is not used, the pin can be used as a general-purpose I/O port.
11 10 9	CS0X/PA0 CS1X/PA1 CS2X/PA2	F	Chip Select 0 output (active-low) Chip Select 1 output (active-low) Chip Select 2 output (active-low) [PA0,1,or 2] When the pin is not used for the above purpose, it can be used as a general-purpose I/O port.
8	CS3X/PA3/EOP1	F	Chip Select 3 output (active-low) [EOP1] DMAC EOP1 output (ch 1). This function is valid when DMAC EOP outputis enaabled. [PA3] When CS3X and EOP1 are not used, the pin can be used as a general-purpose I/O port.
7 6	CS4X/PA4 CS5X/PA5	F	Chip Select 4 output (active-low) Chip Select 5 output (active-low) [PA4 or 5] When the pin is not used for the above purpose, it can be used as a general-ourpose I/O port.
73	AN1/STREQ /DRVV LD/PD1	G	[AN1] A/D converter analog input. This input is used from time to time while input operation is selested. Therefore, it is needed to stop output by other functions except when such output is performed intentionally. [STREQ] STREQ output. This function is valid when STREQ output is enabled. [PD1] General-purpose I/O port. This function is valid when STREQ output is disabled. [DRVVLD] DRVVLD input. This input isused from time to time while input operation is selected. Therefore, it is needed to stop output by other functions except when such output is performed intentionally.
74	AN2/DVDSOS /PD2	G	[AN2] A/D converter analog input. This input is used from time to time while input operation is selected. Therefore, it is needed to stop output by other functions except when such output is performed intentionally. [DVDSOS] DVDSOS output. Thhis function is valid when DVDSOS output is enabled. [PD2] General-purpose I/O port. This function is valid when DVDSOS output is disabled.
75	AN3/INT5/PD3	G	[AN3] A/D converter analog input. This input isused from time to time while input operation is selected. Therefore, it is needed to stop output by other functions except when such output is performed intentionally. [INT5] Inpit of external interrupt request. This input is used from time to time while the corresponding external interrupt is enabled. Therefore, it is needed to stop output by other functions except when such output is performed intentionally. [PD3] General-purpose I/O port.
69	AVCC	-	VCC power supply for A/D converter.
70	AVRH	-	Reference voltage of A/D converter (high potential side). Always turn the pin on or off while the voltage equal to AVCC or higher is applied to VCC.
71	AVSS/AVRL	-	A/D converter VSS power supply and reference voltage (low potential side).
4,43,93	VCC	-	Digital circuit power supply.Be sure to connect the power supply to every VCC pin.
15.40. 65.90	VSS	-	Digital circuit ground level.
78	SC0/PF2	F	[SC0] UART0 clock I/O Clock output can be used when UART0 clock output is enabled. [PF2] General-purpose I/O port. This function is valid when UART0 clock output is disabled.
79	SI1/PF3	F	[SI1] UART1 data input. This input is used from time to time while input operation is selected. Therefore, it is needed to stop output by other functions except when such output is performed intentionally. [PF3] General-purpose I/O port.
80	SO1/PF4	F	[SO1] UART1 data output. This function is valid when UART1 data outout is enabled. [PF4] General-purpose I/O port. This function is valid when UART1 data output is disabled.

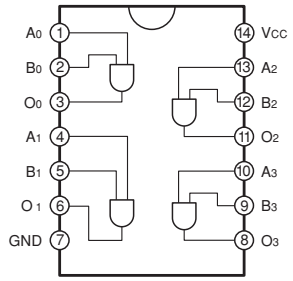
IC BLOCK DIAGRAM & DESCRIPTION

IC800 ZR36705TQC (Micro Controller)

Pin Number	Pin Name		Function
81	SI2/PF5		[SI2] UART2 data input. This input is used from time to time while input operation is selected. Therefore, it is needed to stop output by other functions except when such output is performed intentionally. [PF5] Denerel-purpose I/O port.
82	SO2/PF6		[SO2] UART2 data output. This function is valid when UART2 data output is enabled. [PF6] General-purpose I/O port. This function is valid when UART2 data output is disabled.
83	PF7/INT4/ATGX		[INT4] Input of external interrupt request. This input is used front time to time while the corresponding external interrupt is enabled. Therefore, it is needed yo stop output by other functions except when such output is performed intentionaly. [ATGX] External trigger input for A/D converter. This input is used from time to time when this pin is selected for the A/D start cause. Therefore, it is needed to stop output by other functions excep when such output is performed intentionally. [PF7] General-purpose I/O port.
72	AN0/STRBIN /PD0		[AN0] A/D converter analog input. This input is used from time to time while input operation is selected. Therefore, it is needed to stop output by other functions except when such output is performed intentionally. [STRBIN] The clocksource input for DVDSOS logic. This input is used from time to time while input operation is selected. Therefore, it is needed to stop output by other functions except when such output is performed intentionally. [PD0] General-purpose I/O port.
5	CLK/PA6		System clock output. The pin outputs the same clock frequency as the external bus operating frequency. [PA6] When the pin is not used for this purpose, it can be used as a general-purpose I/O port.
96 97 98 99 100 1 2 3	RAS0/PB0 CS0L/PB1 CS0H/PB2 DW0X/PB3 RAS1/PB4/EOP2 CS1L/PB5 /DREQ2 CS1H/PB6 /DACK2 DW1X/PB7		RAS output of DRAM bank 0 CASL output of DRAM bank 0 CASH output of DRAM bank 0 WE output of DRAM bank 0 RAS output of DRAM bank 1 CASL output of DRAM bank 1 CASH output of DRAM bank 1 WE output of DRAM bank 1 See the description of the DRAM interface for more information. [EOP2] DMAC EOP output (ch 2). This function is valid when DMAC EOP output is enabled. [DREQ2] Input of DMA external transfer request. This input is used from time to time when this pin is selected for the DMAC transfer cause. Therefore, it is needed to stop output by other functions except when such output is performed intentionally. [DACK2] Output of DMAC external transfer reques acceptance (ch 2). This function is valid when the output of DMAC transfer request acceptance is enabled. [PB0-7] When each pin is not used for the corresponding purpose, the pin can be used as a general-purpose I/O port.
16 17 18	MD0 MD1 MD2		Mode pins 0 to 2. Use these pins to setting the basic MCU operation Mode. Connect these pins directly to Vcc or Vss.
92 91	X0 X1		Clock (Oscillator) input Clock (Oscillator) output
14	RSTX		External reset input.
13	HSTX		Hardware Standby input.
12	NMIX		Non-maskable interrupt (NMI) input (active-low).
95 94	INT0/PE0 INT1/PE1		[INT0,1] Input of external interrupt request. This input is used from time to time while the corresponding external interrupt is enabled. Therefore, it is needed to stop output by other functions except when such output is performed intentionally. [PE0,1] General-purpose I/O ports.

IC BLOCK DIAGRAM & DESCRIPTION

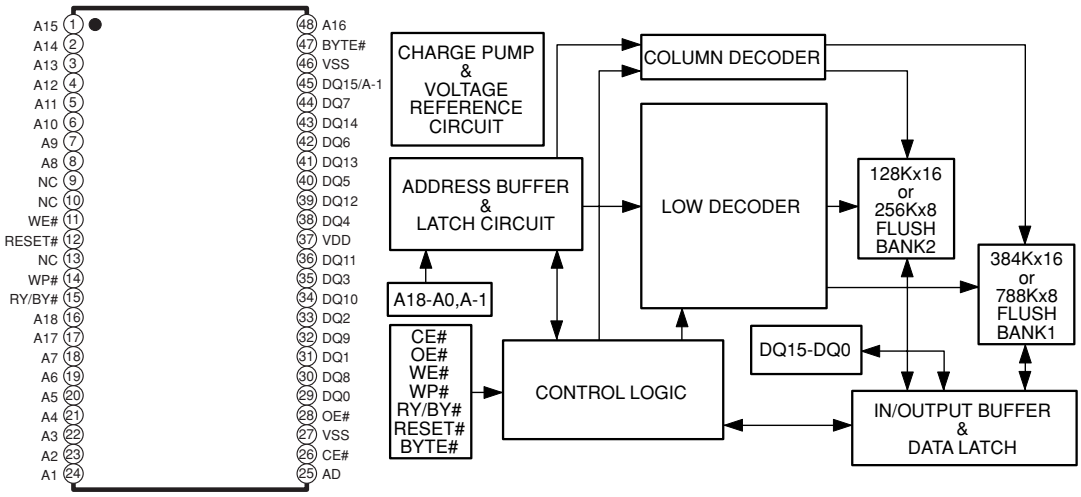
IC806 74VHCT08A (Quad 2-Input AND Gate)



A	B	O
L	L	L
L	H	L
H	L	L
H	H	H

Pin Names	Description
An, BN	Inputs
ON	Outputs

IC818 LE28DW8163T (8Mbit Flash)



Symbols	Pin Name	Functions
A18,A17	Bank Selective Address	Selects bank 1 when "L" and bank 2.
A16-A0,A-1	Flush Bank Address	Sapply address for flush bank.
A18-A15	Flush Bank Block Address	Select flush bank for erease.
A18-A10	Flush Bank Sector Sddress	Select flush bank sector for erease.
DQ15-DQ0	Data Input/Output	To output data during read cycle and receive input data during write cycles. Data is internaliy latched during a writecycle. The output are high inpedance when OE#,CE# is "H".
CE#	Chip Enable	To activate the flush bank when CE# is "L".
OE#	Output Enable	To activate the data output buffer .
WE#	Write Enable	To control the write, erease and program.
BYTE#	Bait Pin	Bait mode when "L" and word mode when "H".
RY/BY#	Ladey/Beje Output	Output "L" when write and ezcept "H".
WP#	Write Protect	To activate hardware write protect when "L".
RESET#	Reset	To activate hardware reset when "L".
VDD	Power Supply	2.7V~3.6V supply.
VSS	Ground	

IC BLOCK DIAGRAM & DESCRIPTION

IC820 ZR36732 (MPEG)

Pin	Name	Type	Direction	Status After RESET/ During STANDBY
17	*HD*[7]	3-S	I/O (r.t.)	Reset: input (p.d.)
18	*HD*[6]	3-S	I/O (r.t.)	Standby: 3-S (p.d.)
20	*HD*[5]	3-S	I/O (r.t.)	
21	*HD*[4]	3-S	I/O (r.t.)	
22	*HD*[3]	3-S	I/O (p.u.)	
23	*HD*[2]	3-S	I/O (r.t.)	
24	*HD*[1]	3-S	I/O (r.t.)	
25	*HD*[0]	3-S	I/O (p.u.)	
	For 16 bits mode, the 8 l.s. data lines of host data bus. For 8 bits mode, only these signals are defined as host data signals.			
9	*HD*[11]	3-S	I/O (p.d.)	Reset: input (p.d.)
11	*HD*[10]		I/O (r.t.)	Standby: 3-S (p.d.)
13	*HD*[9]		I/O (r.t.)	
15	*HD*[8]		I/O (r.t.)	
	When *HWID* is connected to VDDP, these are data lines 11:8 of the 16-bit host data bus.			
5	*HD*[15]	3-S	I/O (r.t.)	Reset: input (p.d.)
6	*HD*[14]		I/O (r.t.)	Standby: 3-S (p.d.)
7	*HD*[13]		I/O (r.t.)	
8	*HD*[12]		I/O (r.t.)	
	When *HWID* is connected to VDDP, these are data lines 15:12 of the 16-bit host data bus. When *HWID* is connected to GNDP, these are the CD-DSP I²S input port pins, as explained in the CD-DSP pin description.			
27	*HA*[3]	I	I	Input
28	*HA*[2]	I	I	
29	*HA*[1]	I	I	
30	*HA*[0]	I	I	
	Host address inputs. These input signals indicate the register accessed in every cycle on the host interface.			
32	*HCS#*	I	I	Input
	Host chip-select input.			
31	*HWR# Ó HR/W#*	I	I	Input
	In host protocol Type A (*HTYPE* = GNDP): *HR/W#*. This input determines the direction of the host access. In host protocol Type B (*HTYPE* = VDDP): *HWR#*. Host write input.			
34	*HRD# Ó HDS#*	I	I	Input
	In host protocol Type A (*HTYPE* = GNDP): *HDS#*. Data strobe input (active low). In host protocol Type B (*HTYPE* = VDDP): *HRD#*. Host read input (active low.)			
36	*HRDY*	3-S	O (p.d.)	Reset: output (low) Standby: 3-S
	Host ready output. When this signal is tri-stated (i.e., it requires a pull-up resistor), up to *SysConfig.CodBurstLen* bytes of code can be written to the Decoder with no need to poll its condition in between. When *HRDY* is low during a host access, the Decoder may still receive at least two additional bytes of code without corrupting the data.			
37	*HIRQ#*	3-S	O (p.u.)	3-S (p.u.)
	Interrupt request. This output signal requests an interrupt from the host controller, if one of the events associated to interrupts occurs, and it is not masked-off. It is de-asserted if the host responds to the interrupt by reading the interrupt status register, or if the host disables the interrupt, or after RESET. Deassertion of the *HIRQ#* output has two modes: De-activated and then tri-stated or directly to is a tri-state condition. The pin needs external pull-up resistor.			
39	*HACK#*	3-S	O (p.u.)	Reset: output (high) Standby: 3-S (p.u.)
	Host acknowledge output. In protocol A, the Decoder indicates that a read or write cycle is completed by asserting this output. In protocol B, this signal is used by the Decoder to indicate a wait state that may be used by fast hosts. In protocol B the host may ignore the *HACK#* signal. When this signal is deasserted it is de-activated and then tri-stated. This pin needs an external pull-up resistor.			

Pin	Name	Type	Direction	Status After RESET/ During STANDBY
	Video Syncs and Clocks Interface (5 pins).			
127	*VCLKx2*	3-S	O (r.t.)	Reset: Standby: 3-S (p.d.)
	Main video clock. 27.000MHz.			
92	*VCLK*	3-S	O (r.t.)	Reset: Standby: 3-S (p.d.)
	A division by two of the *VCLKx2* signal. This signal is used as a sync qualifier.			
95	*HSYNC*	3-S	O (r.t.)	Reset: Standby: 3-S (p.d.)
	Horizontal sync. Polarity and duration are programmable.			
93	*VSYNC*	3-S	O (r.t.)	Reset: Standby: 3-S (p.d.)
	Vertical sync. Polarity and duration are programmable.			
96	*FI*	3-S	O (r.t.)	Reset: Standby: 3-S (p.d.)
	Field indication. Polarity is programmable.			
	Analog Video Encoder Interface (7 pins).			
102	*CVBS/G/Y* (DAC A)	O	AO	Reset: Standby: 3-S
	When the Decoder outputs composite video, this line is CVBS When the Decoder outputs RGB, this line is the Green output When the Decoder outputs YUV, this line is the Y output			
105	*Y/R/V* (DAC B)	O	AO	Reset: Standby: 3-S
	When the Decoder outputs the composite video, this line is Y When the Decoder outputs RGB, this line is the Red output When the Decoder outputs YUV, this line is the V output			
106	*C/B/U* (DAC C)	O	AO	Reset: Standby: 3-S
	When the Decoder outputs the composite video, this line is C When the Decoder outputs RGB, this line is the Blue output When the Decoder outputs YUV, this line is the U output			
103	*CVBS/C* (DAC D)	O	AO	Reset: Standby: 3-S
	When the Decoder outputs any of the types of video, this line can be programmed to output either composite or C.			
108	*RSET*	I	AI	
	Resistive load for gain adjustment of the DACs			
111	*VREF*	I	AI	
	Voltage reference for gain adjustment of the DACs			
100	*COSYNC*	3-S	O (p.d.)	Reset: output (low) Standby: 3-S
	Composite sync output. Active only when RGB analog output is selected. Otherwise, the signal is low.			

Pin	Name	Type	Direction	Status After RESET/ During STANDBY
	Reset, Standby and Idle Status Interface (3 pins)			
124	*RESET#*	I	I	Input
	Reset input. Once de-asserted, the Decoder starts the initialization process.			
122	*STNDBY#*	I	I	Input
	Stand-by input. When asserted together with *RESET#*, all outputs and bidirectional pins float, such that the Decoder is electrically disconnected from its surroundings. All internal clocks are disabled, and the power consumption is minimized.			
160	*IDLE*	3-S	O (p.u.)	Reset: output (high) Standby: 3-S (p.u.)
	Idle, Init and Reset states indication output.			
	Host Interface (29 pins)			
2	*HWID*	I	I	Input
	Determines the width of the host interface data bus. It is allowed to be changed only during RESET. A low level (GNDP) configures the Decoder to an 8-bit host data interface, a high level (VDDP) to 16-bit width.			
1	*HORD*	I	I	Input
	Determines the order of bytes on the host interface data bus in case of 16-bit width (*HWID* at VDDP). It is allowed to be changed only during RESET. A low level (GNDP) configures the Decoder to input/output the m.s. byte on *HD*[15:8], a high level (VDDP) to input/output the m.s. byte on *HD*[7:0]. Must be at GNDP if the host data bus is 8 bits.			
4	*HTYPE*	I	I	Input
	Determines the protocol type for the 8 and 16 bits modes host interface. It is allowed to be changed only during RESET. A low level (GNDP) configures the Decoder to type A, a high level (VDDP) to type B.			

Pin	Name	Type	Direction	Status After RESET/ During STANDBY
	General Purpose I/O (Host Interface) (3 pins).			
134	*GPAIO*	3-S	I/O (r.t.)	Reset: input Standby: 3-S
	General purpose input/output pin, monitored/controlled by the audio processor software. After RESET, this pin is defined as input. Its definition can be configured through ADP commands.			
145	*GPSI*	I	I	Input
	General purpose input, monitored by the system de-multiplexer/video processor software.			
143	*GPSO*	O	O (p.d.)	Reset: output (low) Standby: 3-S
	General purpose output, controlled by the system de-multiplexer/video processor software. After RESET it outputs a low level.			
	DVD-DSP Interface (13 pins).			
151	*DVDREQ*	O	O (p.d.)	Reset: output (low) Standby: 3-S
	DVD-DSP data request output (programmable polarity).			
149	*DVDVALID*	I	I	Input
	DVD-DSP data valid input (programmable polarity).			
148	*DVDSOS*	I	I	Input
	DVD-DSP start of sector input (programmable polarity).			
159	*DVDDAT*[7]	I	I	Input
158	*DVDDAT*[6]			
157	*DVDDAT*[5]			
156	*DVDDAT*[4]			
155	*DVDDAT*[3]			
154	*DVDDAT*[2]			
153	*DVDDAT*[1]			
152	*DVDDAT*[0]			
	DVD-DSP data input bus.			
150	*DVDSTRB*	I	I	Input
	DVD-DSP data bit strobe (clock) input. Programmable polarity.			
147	*DVDERR*	I	I	Input
	DVD-DSP error indication input. Programmable polarity.			
	CD-DSP Interface (4 pins).			
5	*CDERR*	I	I/O (r.t.)	Reset: input (p.d.)
6	*CDFRM*	I	I/O (r.t.)	Standby: 3-S (p.d.)
7	*CDDAT*	I	I/O (r.t.)	
8	*CDCLK*	I	I/O (r.t.)	
	When *HWID* is connected to GNDP, these are the CD-DSP I²S input port pins as follows: *CDERR*: data error indication input *CDFRM*: left/right channel frame input *CDDAT*: data input *CDCLK*: bit clock input When *HWID* is connected to VDDP, these are *HD*[15:12] of the host data bus, as explained in the host interface pin description.			

Pin	Name	Type	Direction	Status After RESET/ During STANDBY
	Digital Audio Interface (8 pins).			
131	*AMCLK*	3-S	I/O (p.u.)	Reset: input Standby: 3-S
	Audio Master Clock input/output. 128, 192, 256, 384 or 512 times the sampling frequency (programmable).			
133	*S/PDIF* (*AOUT*[3])	O	O (p.d.)	Reset: input Standby: 3-S
	S/PDIF transmitter output for digital coded or reconstructed audio data. Alternately can be used as a fourth audio output. After RESET this pin outputs low level.			
138	*AOUT*[2]	O	O (p.d.)	Reset: output (low)
137	*AOUT*[1]			Standby: 3-S
136	*AOUT*[0]			
	Serial outputs of digital stereo audio.			
113	*AIN*	I	I	Input
	Serial input of digital stereo audio.			
139	*ALRCLK*	O	O (p.d.)	Reset: output (low) Standby: 3-S
	Digital audio left/right select output for the audio port. Square wave, at the sampling frequency. Programmable polarity interpretation for input.			
141	*ABCLK*	O	O (p.d.)	Reset: output (low) Standby: 3-S
	Digital audio bit-clock output. Data on *AOUT* and *AIN* is output or latched, respectively, with the rising or falling (programmable) edge of this clock.			
	PLL/Clock Interface (5 pins).			
120	*GCLK*	I	I	Input
	27.000MHz clock or crystal input for main processing clock generation.			
117	*GCLK1*	I	I	Input
	27.000MHz clock input for audio master clock generation. In normal operation must be connected to *GCLK*.			
119	*XO*	O	AO	
	Output to a crystal that is connected to *GCLK*. If a crystal is not used at *GCLK*, *XO* must be left not connected.			
115	*PLLCFG*[1]	I	I	Input
118	*PLLCFG*[0]	I	I	Input
	PLL configuration inputs. Allowed to be changed only during RESET. In normal operation both pins must be connected to GNDP.			

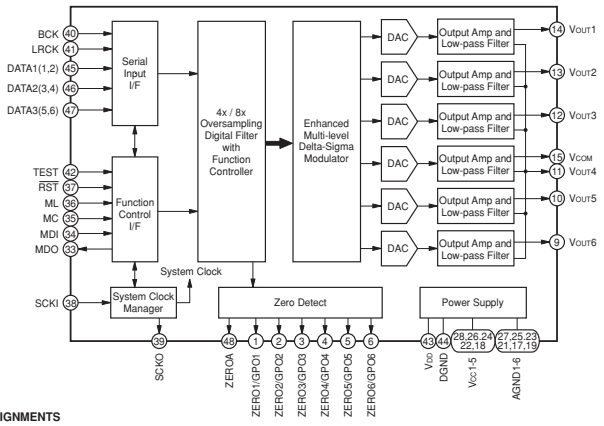
IC BLOCK DIAGRAM & DESCRIPTION

IC820 ZR36732 (MPEG)

Pin	Name	Type	Direction	Status After RESET/ During STANDBY
	SDRAM Interface (35 pins).			
90	*RAMDAT*[15]	3-S	I/O (r.t.)	Reset: input (p.d.)
87	*RAMDAT*[14]			Standby: 3-S (p.d.)
84	*RAMDAT*[13]			
81	*RAMDAT*[12]			
78	*RAMDAT*[11]			
75	*RAMDAT*[10]			
72	*RAMDAT*[9]			
68	*RAMDAT*[8]			
70	*RAMDAT*[7]			
74	*RAMDAT*[6]			
76	*RAMDAT*[5]			
79	*RAMDAT*[4]			
82	*RAMDAT*[3]			
85	*RAMDAT*[2]			
88	*RAMDAT*[1]			
91	*RAMDAT*[0]			
	SDRAM bidirectional data bus.			
55	*RAMADD*[11]	O	O (p.d.)	Reset: output
53	*RAMADD*[10]			Standby: 3-S
54	*RAMADD*[9]			
51	*RAMADD*[8]			
48	*RAMADD*[7]			
46	*RAMADD*[6]			
43	*RAMADD*[5]			
41	*RAMADD*[4]			
42	*RAMADD*[3]			
45	*RAMADD*[2]			
47	*RAMADD*[1]			
50	*RAMADD*[0]			
	SDRAM address bus output.			
60	*RAMRAS#*	O	O (p.u.)	Reset: output
				Standby: 3-S (p.u.)
	SDRAM row select output.			
61	*RAMCAS#*	O	O (p.u.)	Reset: output
				Standby: 3-S (p.u.)
	SDRAM column select output.			
66	*PCLK*	O	O (p.d.)	Reset: output
				Standby: 3-S
	SDRAM clock output (Same as internal processing clock).			
64	*RAMDQM*	O	O (p.d.)	Reset: output
				Standby: 3-S (p.u.)
	SDRAM data masking output.			
57	*RAMCS0#*	O	O (p.u.)	Reset: output
				Standby: 3-S (p.u.)
	SDRAM chip select output for the lower (or only) 2MB device (16Mbit).			
59	*RAMCS1#*	O	O (p.u.)	Reset: output
				Standby: 3-S (p.u.)
	SDRAM chip select output for the upper 2MB device (16Mbit).			
62	*RAMWE#*	O	O (p.u.)	Reset: output
				Standby: 3-S (p.u.)
	SDRAM write enable output.			

Pin	Name	Type	Direction	Status After RESET/ During STANDBY
	Test Signal Interface (3 pins).			
125	*SCNENBL*	I	I	Input
	Production test pin (connected directly to GNDP in normal operation).			
129	*TESTMODE*		I	Input
	In normal operation this pin must be connected directly to GNDP.			
112	*ICEMODE#*		I	Input
	In normal operation this pin must be connected directly to VDDP. If it is asserted, then the ADP goes into ICE mode. In this mode 4 of the Decoder pins turn into ICE interface pins: *HD*[11] = TCK ó ICE interface clock *HD*[10] =TMS ó IC E interface mode select input *HD*[9] = TDO ó IC E interface data output *HD*[8] = TDI ó ICE interface data input			
	Power Signals (49 pins).			
*	*GNDP*			(* pins 10, 40, 49, 56, 65, 69, 80, 86, 97, 128, 146)
	Digital ground of 3.3 V supply.			
*	V_{DDP}			(* pins 3, 16, 19, 26, 38, 44, 52, 58, 67, 71, 77, 83, 89, 94, 98, 99, 126, 135, 140)
	3.3 V Digital power supply.			
132	*GNDP-A2*			
	Digital ground of filtered 3.3 V supply for *AMCLK*.			
130	*VDDP-A2*			
	3.3 V filtered digital power supply for *AMCLK*.			
*	*GNDC*			(* pins 14, 35, 73, 114, 144)
	Digital ground of 1.8 V supply.			
*	V_{DDC}			(* pins 12, 33, 63, 116, 142)
	1.8 V Digital power supply.			
123	*GNDA*			
	Ground plane of internal PLL circuit.			
121	*VDDA*			
	1.8 V Power supply for internal PLL circuit.			
104	*VDDDAC*			
	3.3 V Analog power supply for the DACs.			
101 107 109 110	*GNDDAC_D* *GNDDAC_B* *GNDDAC_P* *GNDDAC_S*			
	Grounds for the DACs 3.3 V analog power supply			

IC870 PCM1602Y (Digital to Analog Controller)

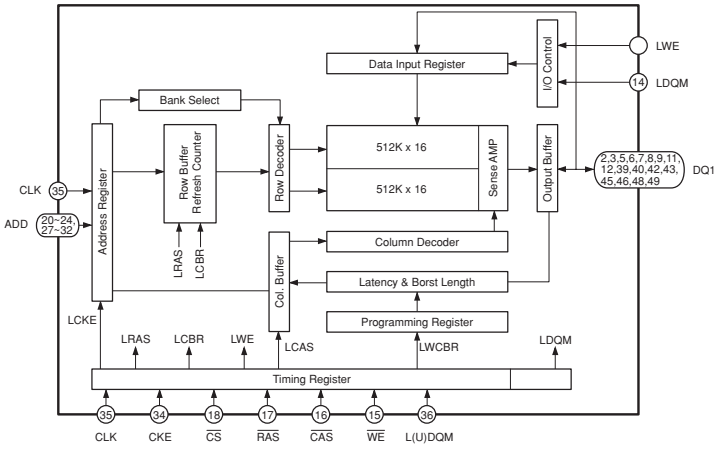


PIN ASSIGNMENTS

PIN	NAME	I/O	DESCRIPTION
1	ZERO1/GPO1	O	Zero Data Flag for VOUT1. Can also be used as GPO pin.
2	ZERO2/PGO2	O	Zero Data Flag for VOUT2. Can also be used as GPO pin.
3	ZERO3/PGO3	O	Zero Data Flag for VOUT3. Can also be used as GPO pin.
4	ZERO4/PGO4	O	Zero Data Flag for VOUT4. Can also be used as GPO pin.
5	ZERO5/PGO5	O	Zero Data Flag for VOUT5. Can also be used as GPO pin.
6	ZERO6/PGO6	O	Zero Data Flag for VOUT6. Can also be used as GPO pin.
7	NC	-	No Connection
8	NC	-	No Connection
9	VOUT6	O	Voltage Output of Audio Signal Corresponding to Rch on DATA3. Up to 96kHz.
10	VOUT5	O	Voltage Output of Audio Signal Corresponding to Lch on DATA3. Up to 96kHz.
11	VOUT4	O	Voltage Output of Audio Signal Corresponding to Rch on DAYA2. Up to 96kHz.
12	VOUT3	O	Voltage Output of Audio Signal Corresponding to Lch on DATA2. Up to 96kHz.
13	VOUT2	O	Voltage Output of Audio Signal Corresponding to Rch on DATA1. Up to 192kHz.
14	VOUT1	O	Voltage Output of Audio Signal Corresponding to Lch on DATA1. Up to 192kHz.
15	VCOM	O	Common Voltage Output. This pin should be bypassed with a 10uF capacitor to AGND.
16	NC	O	No Connection
17	AGND5	-	Analog Ground
18	VCC5	-	Analog Power Supply, +5V
19	AGND6	-	Analog Ground
20	NC	-	No Connection
21	AGND4	-	Analog Ground
22	VCC4	-	Analog Power Supply, +5V
23	AGND3	-	Analog Ground
24	VCC3	-	Analog Power Supply, +5V
25	AGND2	-	Analog Ground
26	VCC2	-	Analog Power Supply, +5V
27	AGND1	-	Analog Ground
28	VCC1	-	Analog Power Supply, +5V
29	NC	-	No Connection
30	NC	-	No Connection
31	NC	-	No Connection
32	NC	-	No Connection
33	MDO	O	Serial Data Output for Function Register Control Port (3)
34	MDI	I	Serial Data Input for Function Register Control Port (1)
35	MC	I	Shift Clock for Function Register Control Port (1)
36	ML	I	Latch Enable for Function Register Control Port (1)
37	RST	I	System Reset, Active LOW (1)
38	SCKI	I	System Clock In. Input frequency is 128,192,256,384,512, or 768fs (2)
39	SCKO	O	Buffered Clock Output. Output frequency is 128,192,256,384,512, or 768fs or one-half of 128,192,256,384,512 or 768fs.
40	BCK	I	Shift Clock Input for Serial Audio Data. (2)
41	LRCK	I	Left and Right Clock Input. This clock is equal to the sampling rate, fs. (2)
42	TEST	-	Test Pin. This pin should be connected to DGND. (1)
43	VDD	-	Digital Power Supply, +3.3V
44	DGND	-	Digital Ground for +3.3V
45	DATA1	I	Serial Audio Data Input for VOUT1 and VOUT2 (2)
46	DATA2	I	Serial Audio Data Input for VOUT3 and VOUT4 (2)
47	DATA3	I	Serial Audio Data Input for VOUT5 and VOUT6 (2)
48	ZEROA	O	Zero Data Flag. Logical "AND" of ZERO1 through ZERO6.

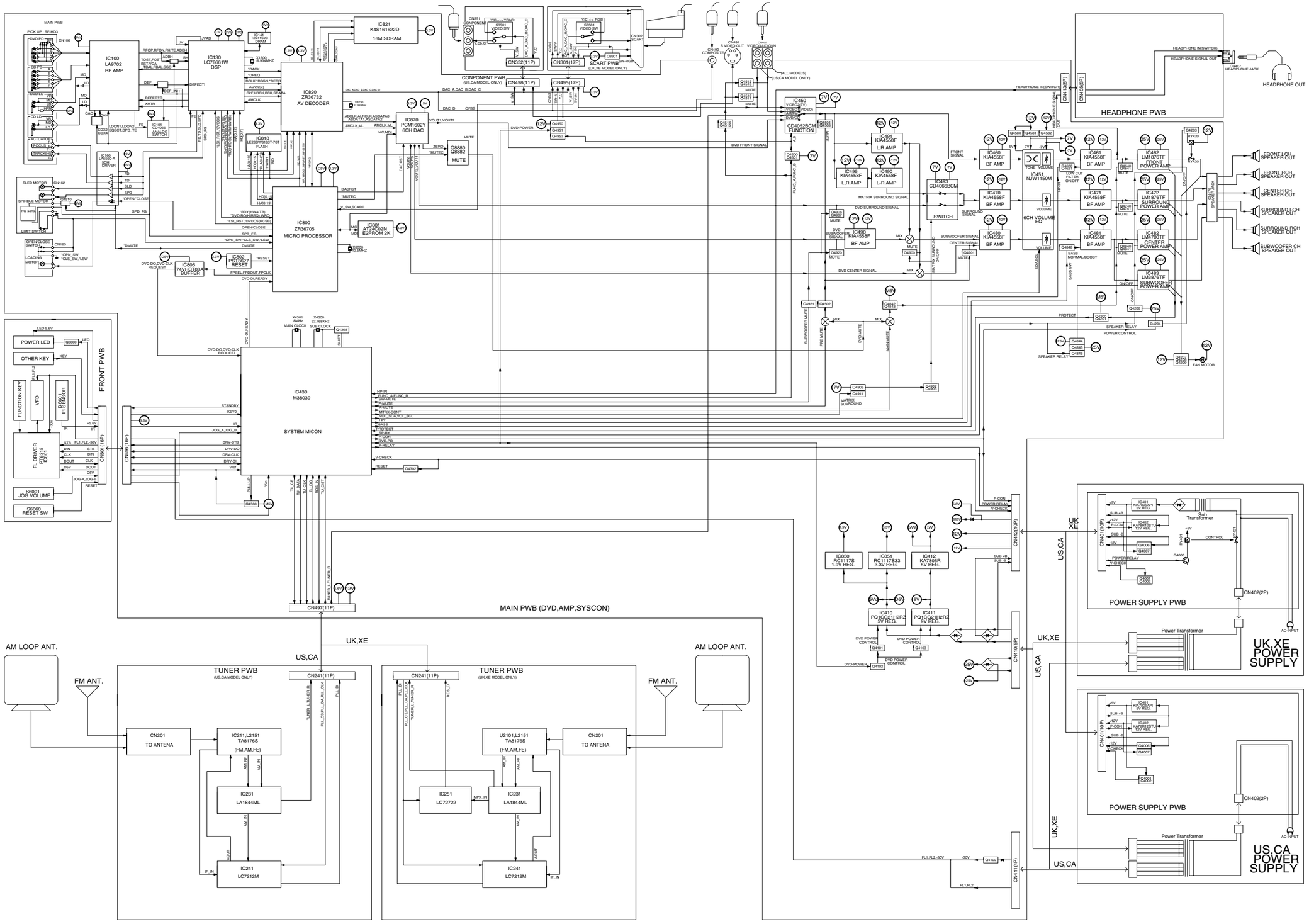
NOTES: (1) Schmitt-Trigger input with internal pull-down, 5V tolerant. (2) Schmitt-Trigger inout, 5V tolerant. (3) Tri-state output.

IC821 K4S16162D (512 X 16Bit X 2 Bank synchronous DRAM)

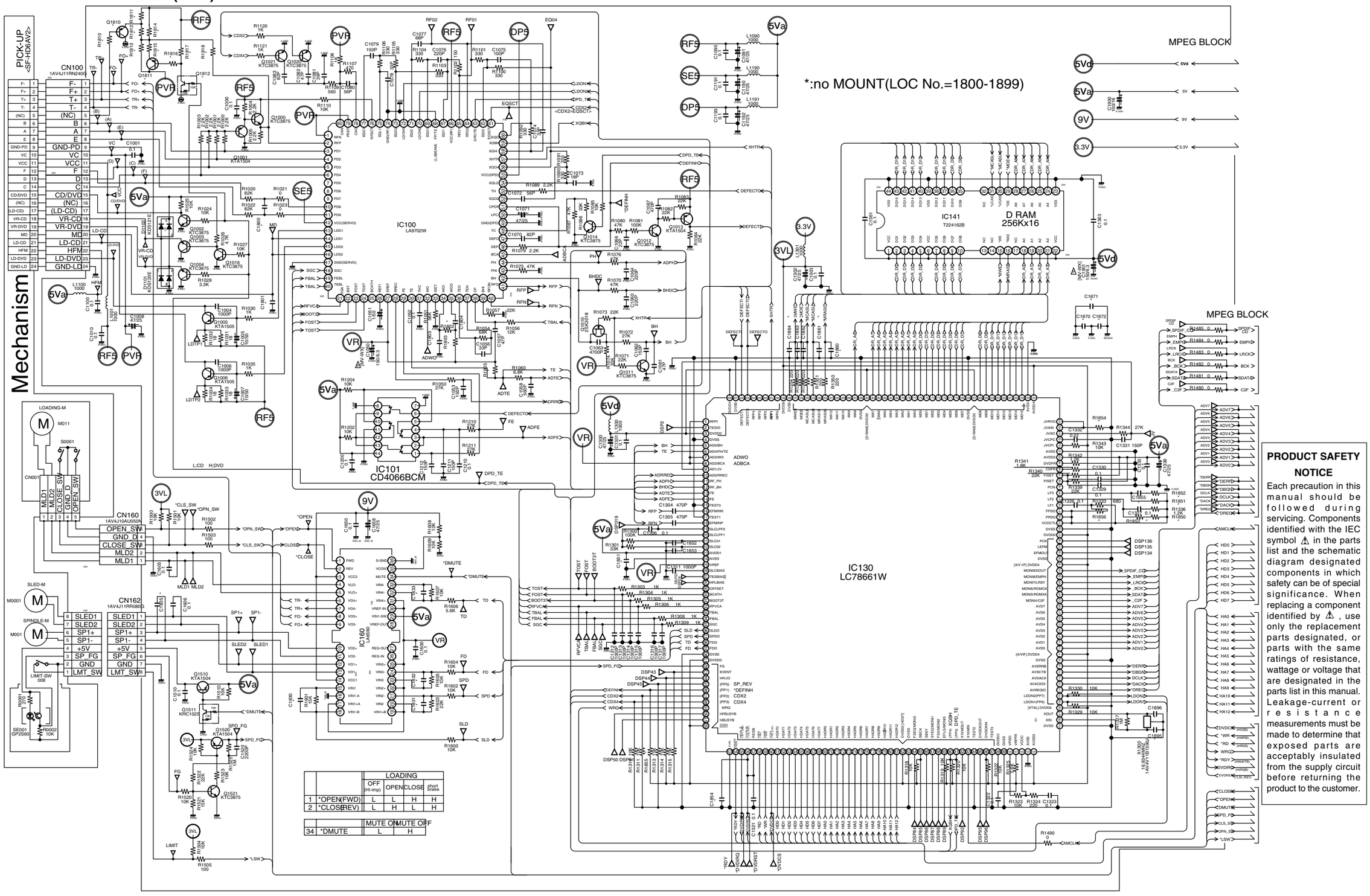


Pin	NAME	Input Function
CLK	System Clock	Active on the positive going edge to sample all inputs.
$\overline{CS}$	Chip Select	Disables or enables device operation by masking or enabling all inputs except CLK,CKE and L(U)DQM
CKE	Clock Enable	Masks system clock to freeze operation from the next clock cycle. CKE should be enabled at least one cycle prior to new command. Disable input buffers for power down in standby.
A_0 - A_{10}/AP	Address	Row/column addresses are multiplexed on the same pins. Row address : RA_0 - RA_{10}, Column address : CA_0 - CA_7
BA	Bank Select Address	Selects bank to be activated during row address latch time. Selects bank for read/write during column address latch time.
$\overline{RAS}$	Row Address Strobe	Latches row addresses on the positive going edge of the CLK with $\overline{RAS}$ low. Enables row access & precharge.
$\overline{CAS}$	Column Address Strobe	Latchea column addresses on the positive going edge of the CLK with $\overline{CAS}$ low. Enables column access.
$\overline{WE}$	Write Enable	Enables write operation and row precharge. Latches data in starting from $\overline{CAS}$, $\overline{WE}$ active.
L(U)DQM	Data Input/Output Mask	Mskes data output Hi-Z, tSHZ sfter the clock and masks the output. Blocks data input when L(U)DQM active.
$DQ_{0 \sim 15}$	Data Input/Output	Data inputs/outputs are multiplexed on the same pins.
VDD/VSS	Power Supply/Ground	Power and ground for the input buffers and the core logic.
VDDQ/VSSQ	Dsta Output Power/Ground	Isolated power supply and ground for the output buffers to provide improved noise immunity.
N.C/RFU	No Connection/ Reserved for Furure Use	This pin is recommended to be left No Connection on the device.

BLOCK DIAGRAM

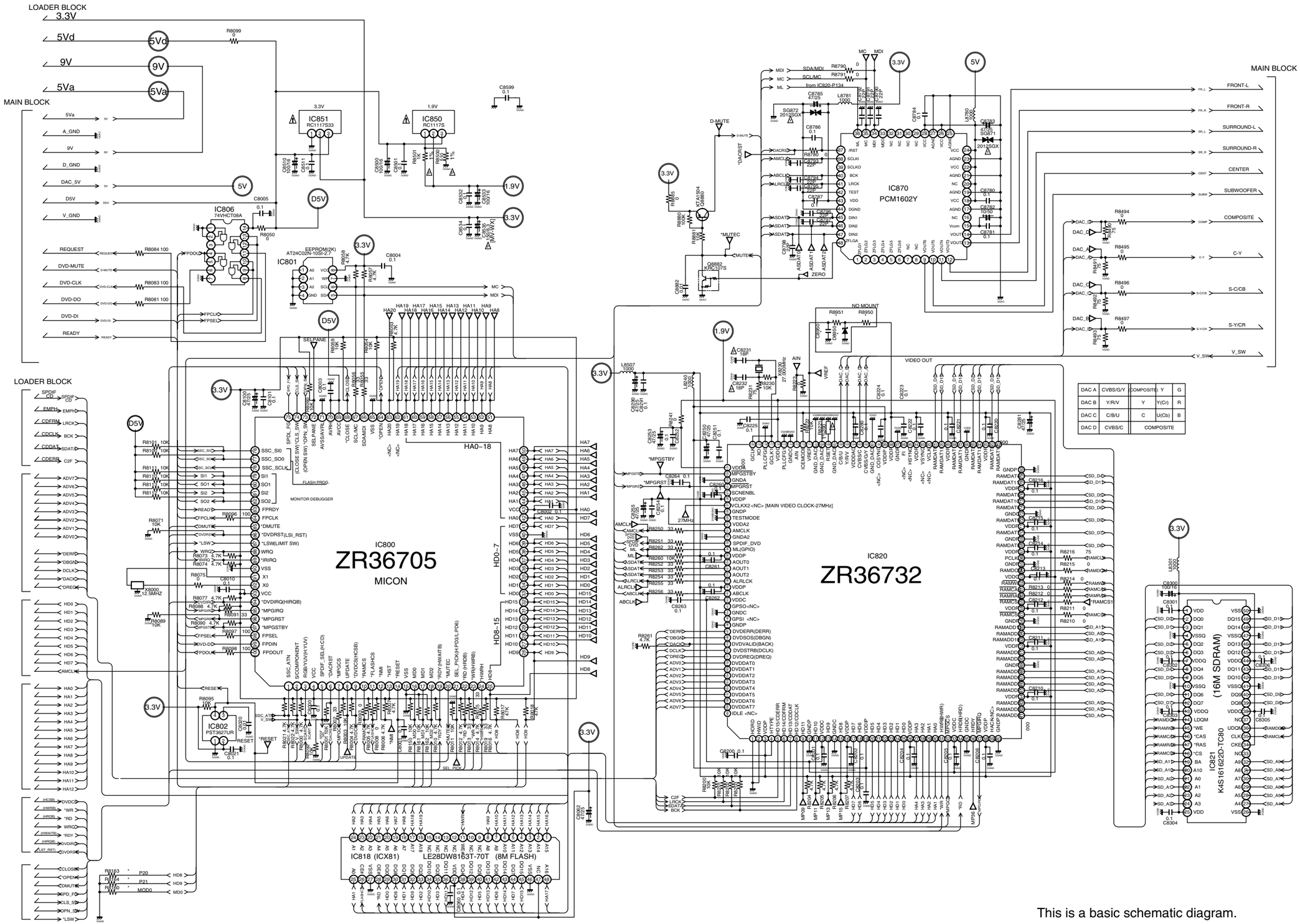


This is a basic block diagram.



This is a basic schematic diagram.

SCHEMATIC DIAGRAM (MPEG)



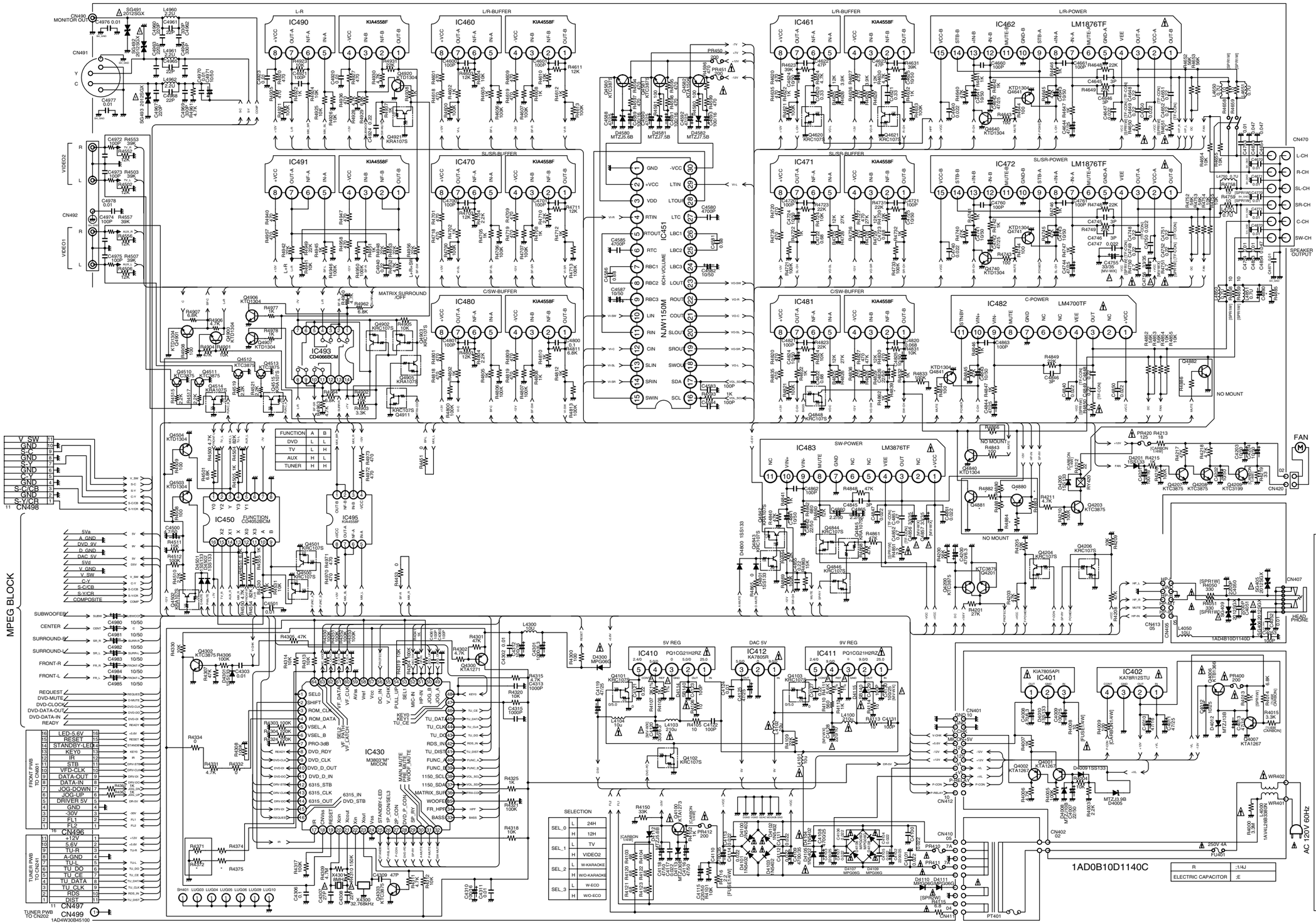
DAC A	CVBS/G/Y	COMPOSITE	Y	G
DAC B	Y/R/V	Y	Y(Cr)	R
DAC C	C/B/U	C	U(Cb)	B
DAC D	CVBS/C	COMPOSITE		

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designated components in which safety can be of special significance. When replacing a component identified by ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

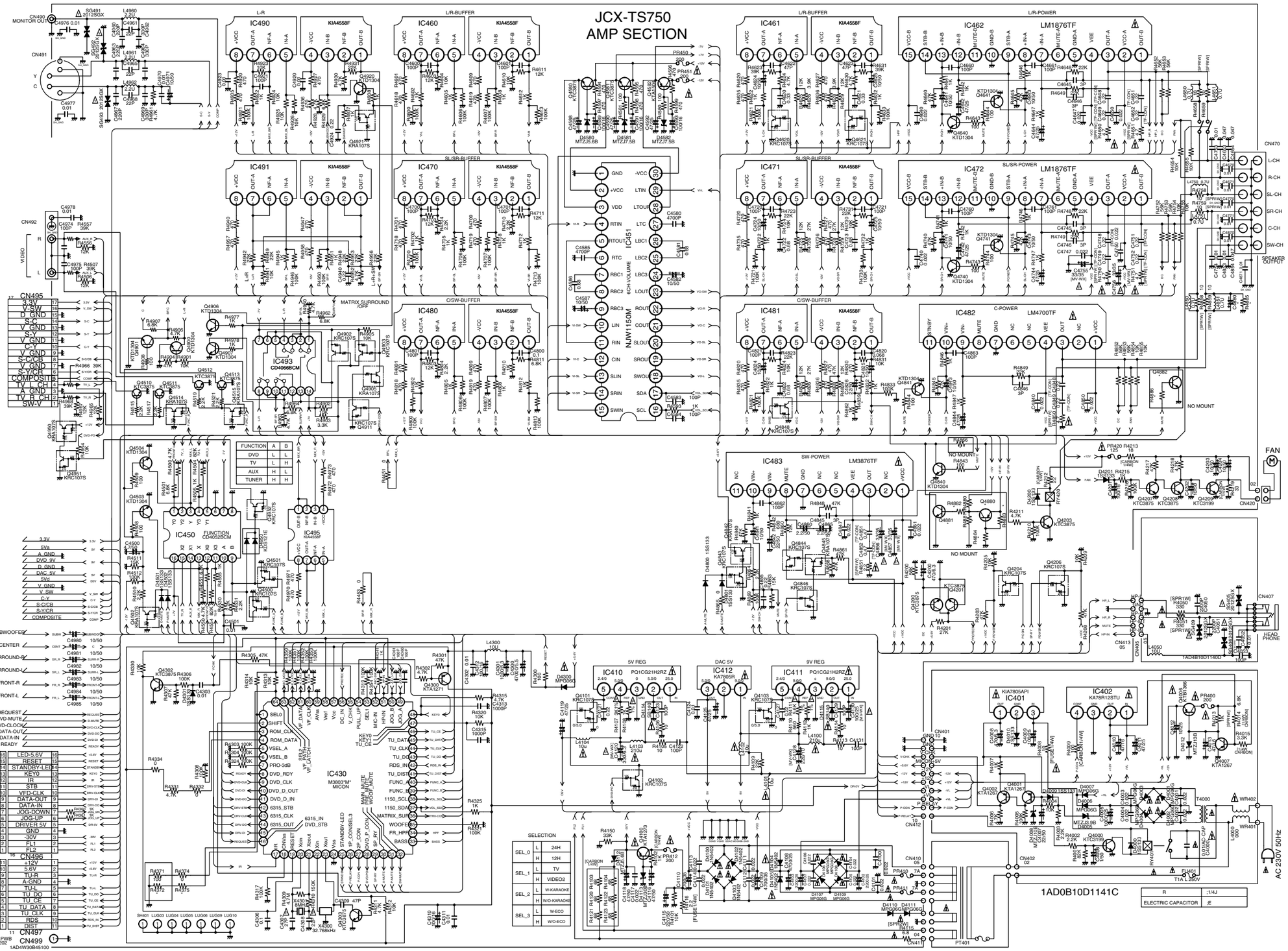
This is a basic schematic diagram.

SCHEMATIC DIAGRAM (AMP for 750,730/CA)



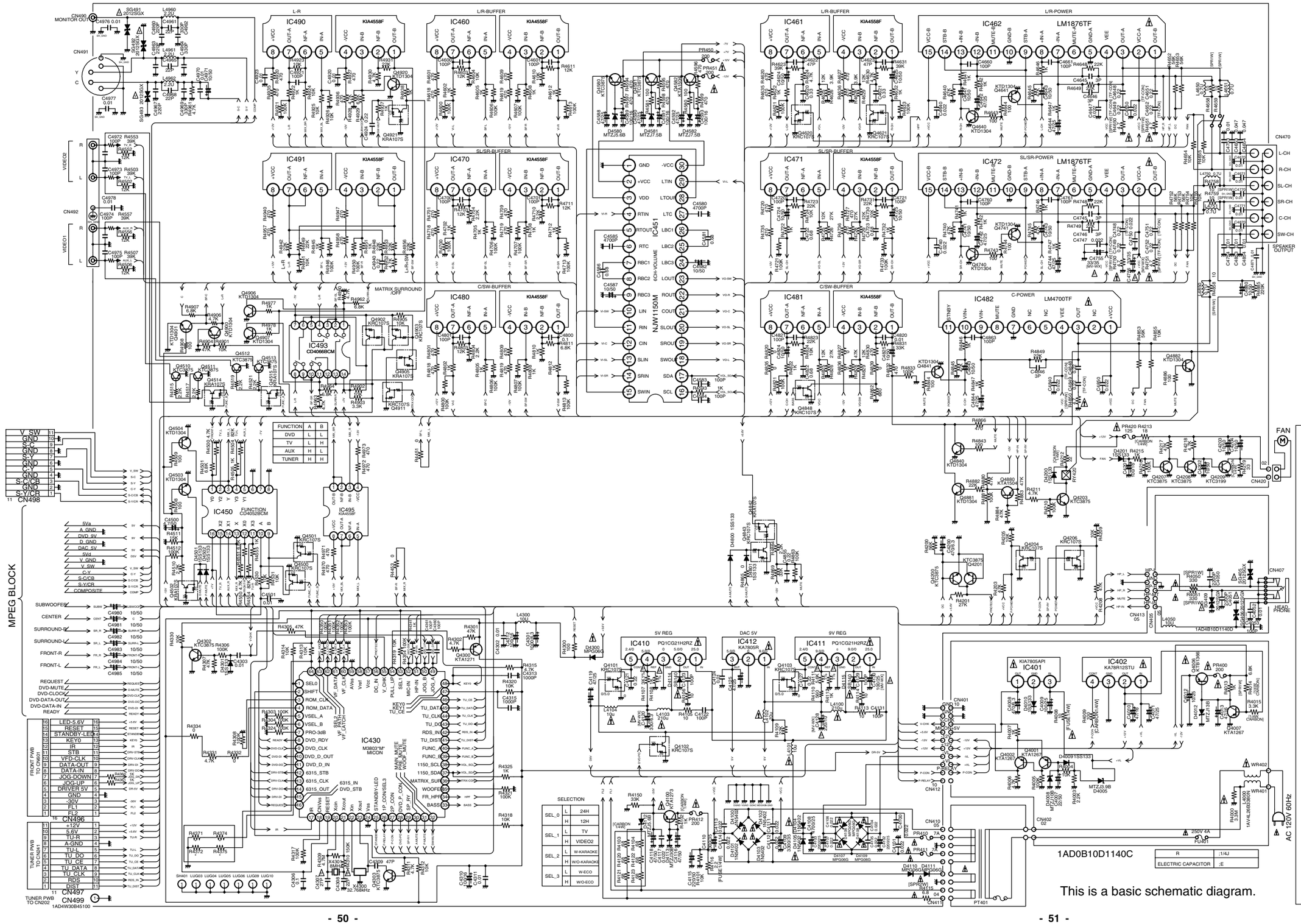
This is a basic schematic diagram.

SCHEMATIC DIAGRAM (AMP for 750/ UK,XE)



This is a basic schematic diagram.

SCHEMATIC DIAGRAM (AMP for 750/US)



This is a basic schematic diagram.

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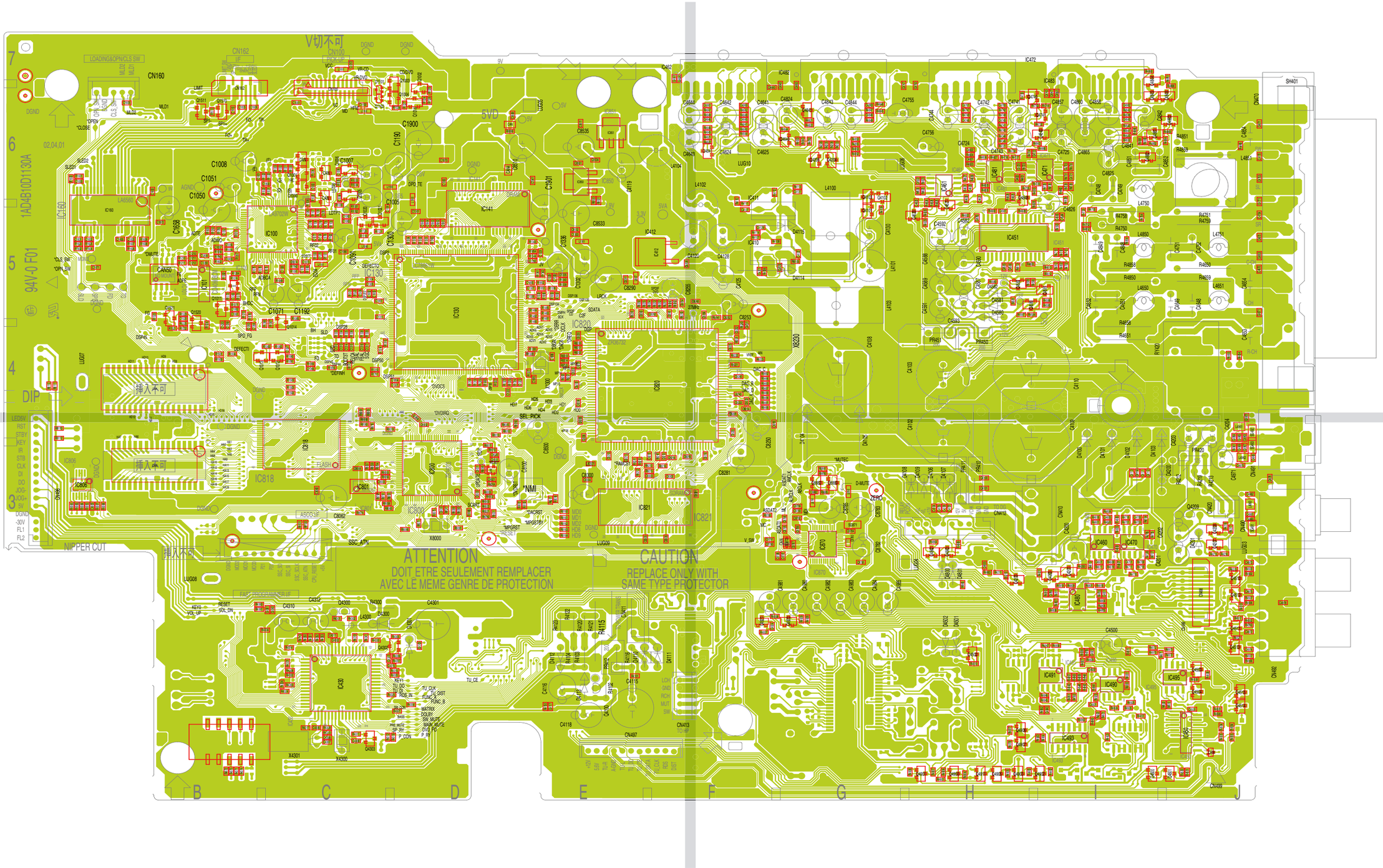
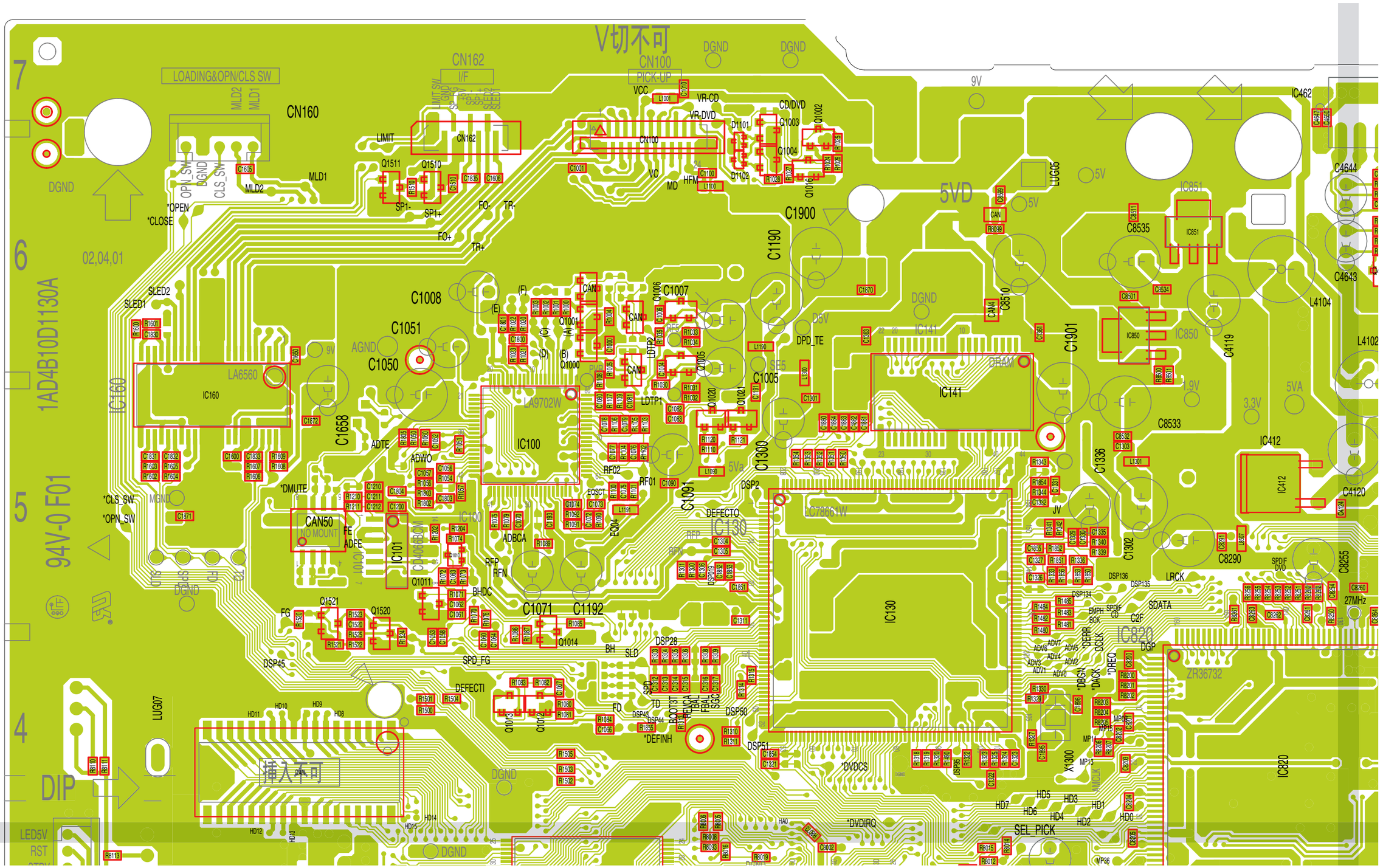
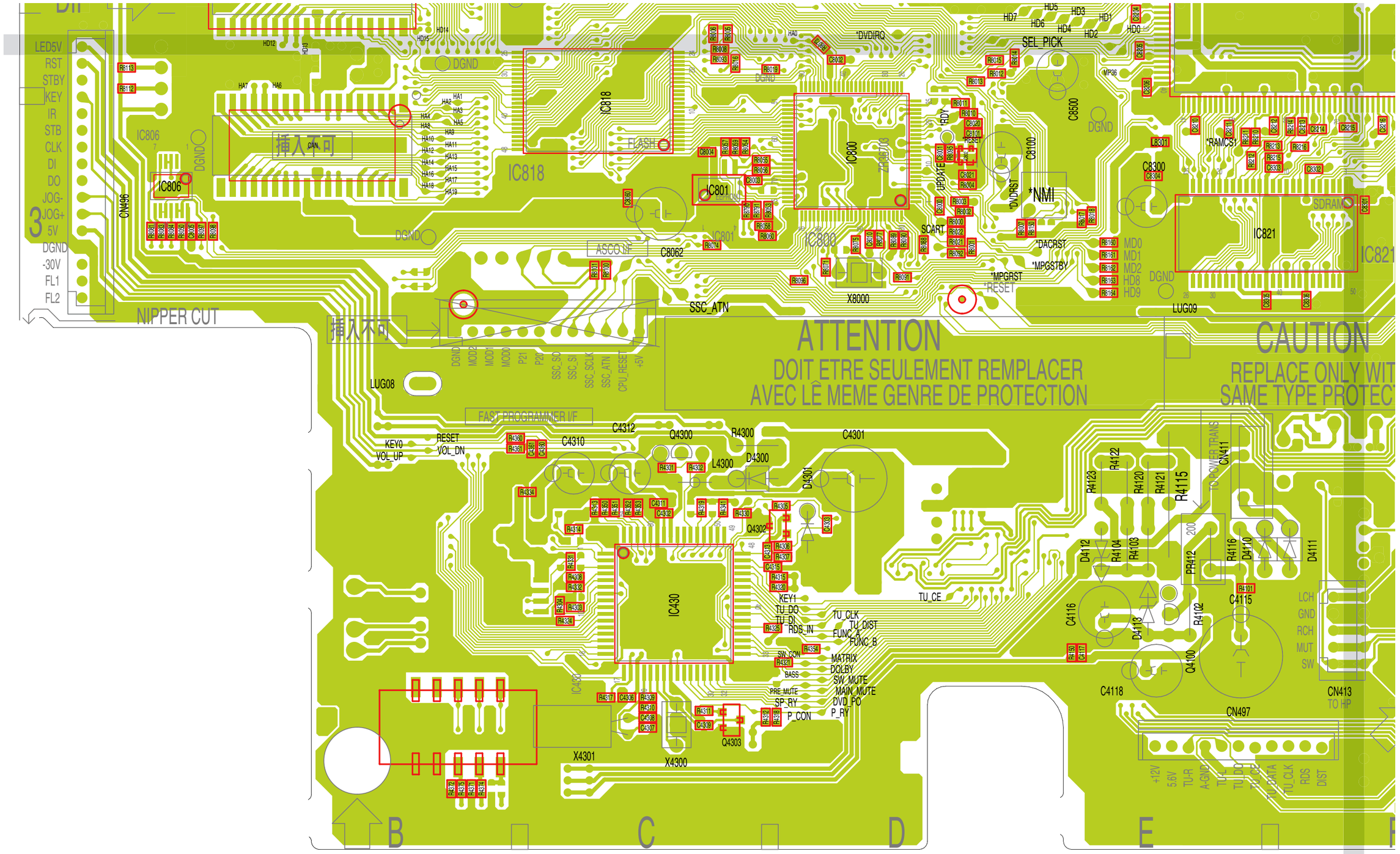
WIRING DIAGRAM (MAIN,AMP-DVD A SIDE for CA)

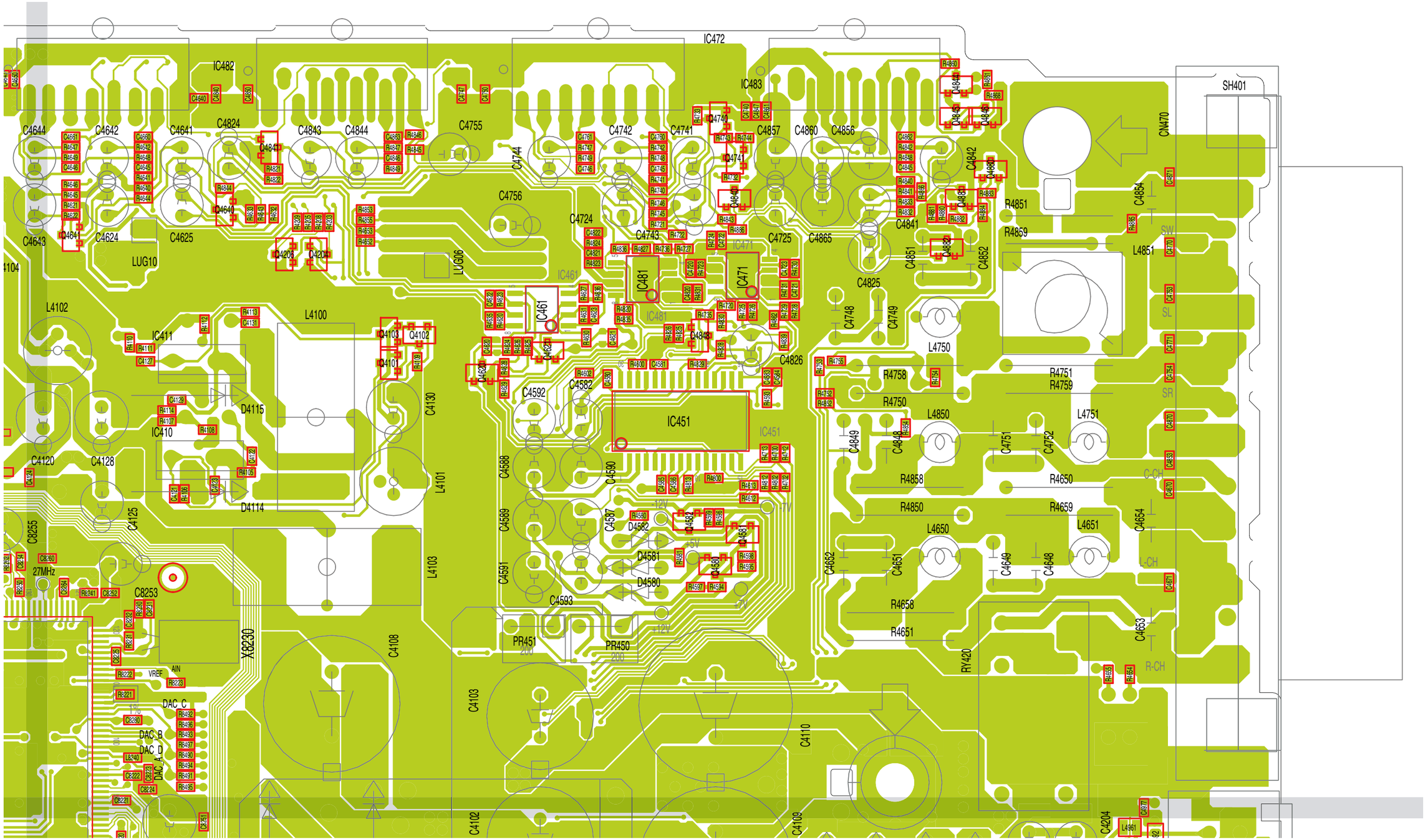



V切不可
CN162
I/F
CN100
PICK-UP
LOADING&OPN/CLS SW
CN160
DGND
DGND
9V
IC462
5VD
5V
LUG05
IC851
C8535
C4644
C4643
L4104
L4102
C1900
C1190
C1870
C8510
C1901
IC141
DRAM
IC850
C4119
1.9V
3.3V
5VA
C8533
IC412
C4120
C8255
C8290
C1336
C1302
C1300
C1091
IC130
LC78661W
DSP2
DSP136
DSP135
DSP134
LRCK
SDATA
C2F
SPDIF DVD
SPDIF CD
EMPH
BCK
DERR
DCLK
DEEQ
DBCK
DBCN
IC820
DGP
ZR36732
27MHz
X1300
MP13
MP15
MP16
MP36
SEL_PICK
HD7
HD6
HD5
HD4
HD3
HD2
HD1
HD0
*DVDIRQ
*DVDCS
DPD_TE
C1005
C1007
C1008
C1051
C1050
AGND
LA6560
IC160
C1658
ADTE
ADWO
*DMUTE
*CLS_SW
*OPN_SW
MGND
CAN50
NO MOUNT
FE
ADFE
C1101
C1400
C1007
Q1011
Q1521
Q1520
FG
DSP45
SPD_FG
DEFECTI
BHDC
C1071
C1192
Q1014
ADBCA
RFP
RFN
IC100
LA9702W
RF02
RF01
EQ04
FOSCT
LDTP1
LDTP2
CAN0
CAN1
CAN2
CAN3
CAN4
Q1001
Q1000
Q1006
Q1005
Q1020
Q1021
Q1013
Q1012
BH
SLD
FD
TD
SPD
DSP28
DSP43
DSP44
DSP50
DSP51
*DEFINH
BOOT3T
REFVCA
FBAL
SGC
LIMIT
LIMIT SW
GND
SLED2
SLED1
MLD2
MLD1
*OPEN
*CLOSE
OPN_SW
CLS_SW
SP1-
SP1+
FO-
FO+
TR-
TR+
VCC
VC
MD
HFM
VR-CD
VR-DVD
CD/DVD
D1101
D1102
Q1002
Q1003
Q1004
Q1016
02,04,01
94V-0 F01
1AD4B10D1130A
IC160
LUG07
DIP
LED5V
RST
挿入不可
DGND
5Va

WIRING DIAGRAM (MAIN,AMP-DVD A SIDE for CA BOTTOM LEFT)



WIRING DIAGRAM (MAIN,AMP-DVD A SIDE for CA TOP RIGHT)


IC472
IC482
IC483
SH401
CN470
C4644
C4642
C4641
C4824
C4843
C4844
C4755
C4742
C4741
C4857
C4860
C4856
C4744
C4756
C4724
C4743
C4725
C4865
C4643
C4624
C4625
LUG10
LUG06
IC461
IC481
IC471
C4825
C4748
C4749
C4851
C4852
C4841
C4842
C4854
R4851
R4859
L4851
SW
SL
SR
L4102
L4100
IC411
C4130
L4101
C4103
C4108
C4102
C4109
C4110
C4588
C4589
C4591
C4590
C4587
C4592
C4582
C4593
IC451
L4750
R4751
R4759
R4758
R4750
L4850
L4751
C4752
C4751
C4849
C4848
C4826
R4858
R4650
R4850
R4659
L4650
L4651
C4654
C4652
C4651
C4649
C4648
C-CH
L-CH
R-CH
R4658
R4651
C4653
RY420
C4204
L4961
D4115
D4114
IC410
C4120
C4128
C4125
C8255
27MHz
C8253
X8230
AIN
VREF
DAC_C
DAC_B
DAC_D
DAC_A
D4582
D4581
D4580
PR451
PR450
Q4103
Q4102
Q4101
Q4206
Q4204
Q4640
Q4641
Q4821
Q4822
Q4740
Q4741
Q4481
Q4482
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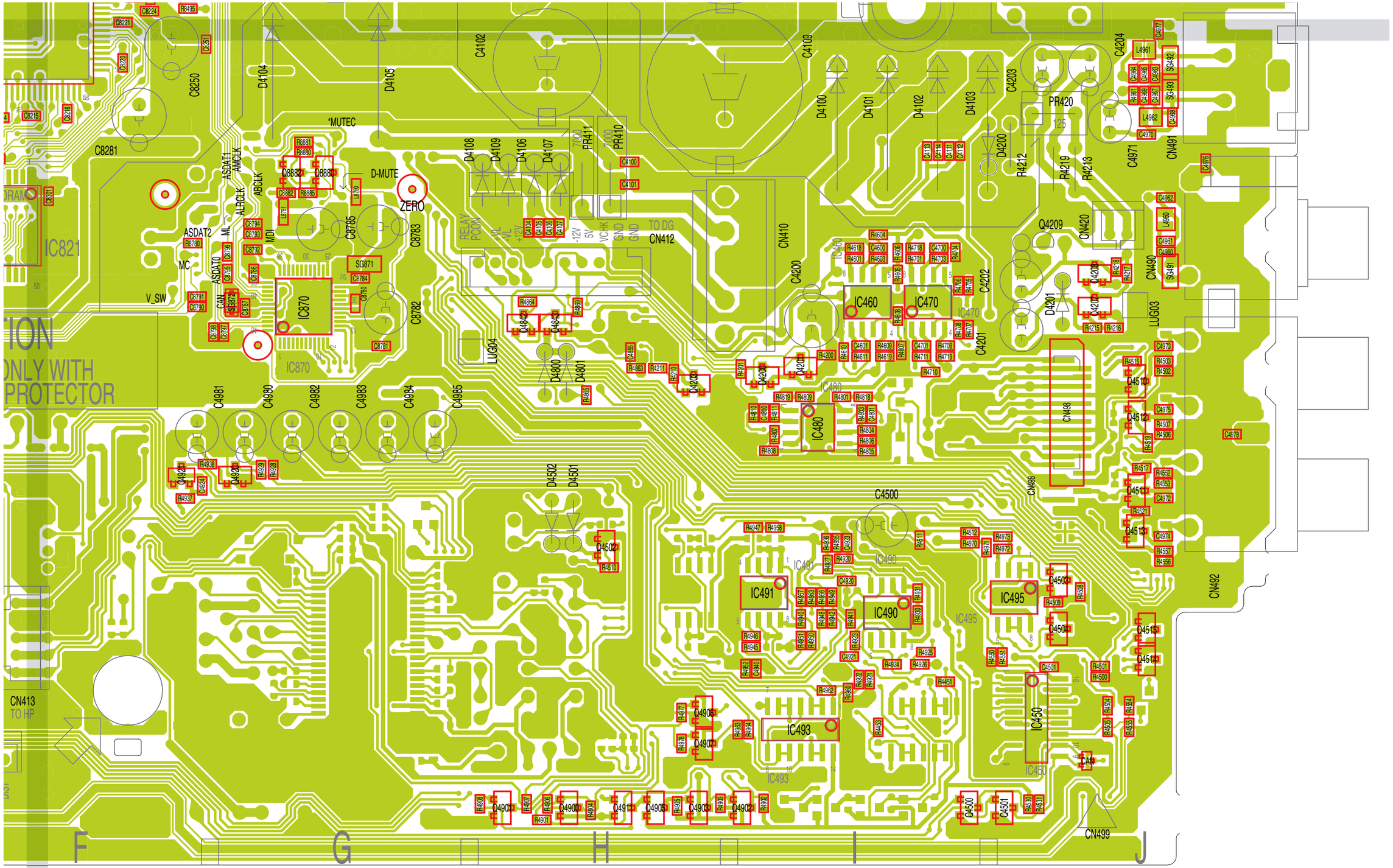
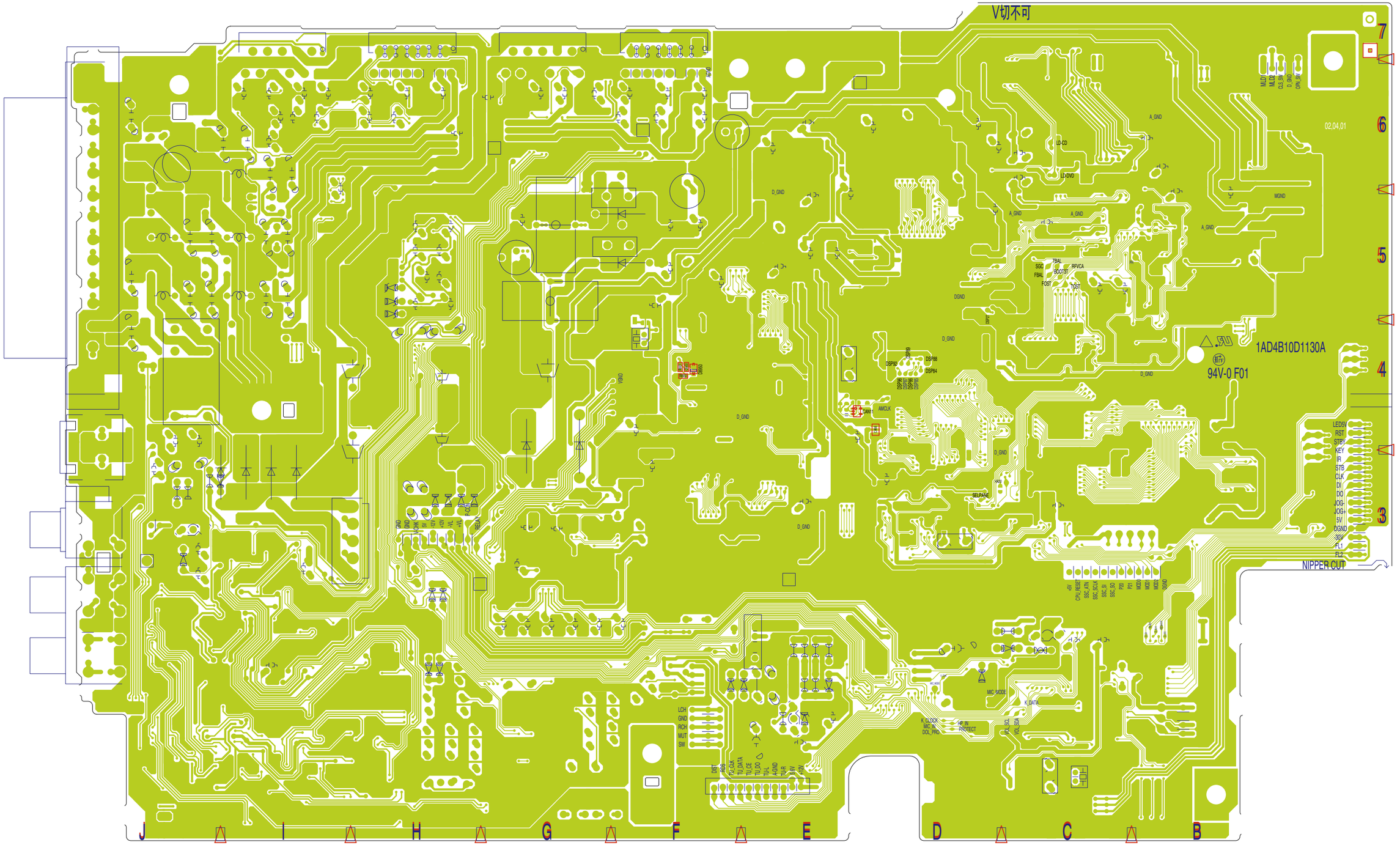
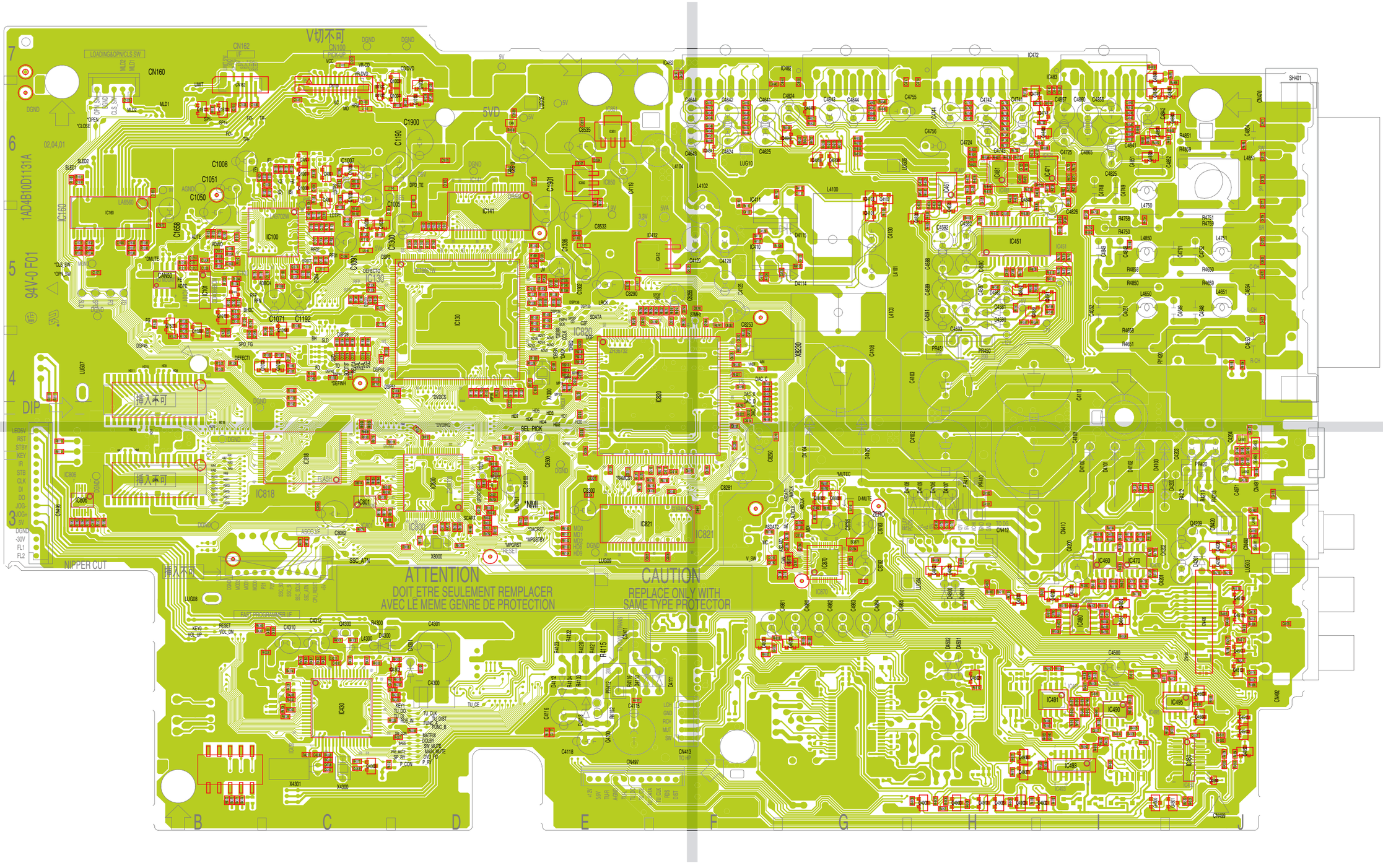
Q4506
Q4507
Q4508
Q4509
Q4510
Q4511
Q4512
Q4513
Q4514
Q4515
Q4516
Q4517
Q4518
Q4519
Q4520

WIRING DIAGRAM (MAIN,AMP-DVD A SIDE for CA BOTTOM RIGHT)




V切不可
1AD4B10D1130A
94V-0 F01
NIPPER CUT
02,04,01
7
6
5
4
3
J
I
H
G
F
E
D
C
B


ATTENTION
DOIT ETRE SEULEMENT REMPLACER
AVEC LE MEME GENRE DE PROTECTION
CAUTION
REPLACE ONLY WITH
SAME TYPE PROTECTOR
NIPPER CUT
插入不可
V切不可
CN160
CN162
CN100
CN470
CN491
CN492
CN497
CN412
CN413
CN482
IC818
IC821
IC820
IC130
IC100
IC141
IC451
IC460
IC470
IC491
IC490
IC495
IC493
IC430
IC300
IC1901
IC4119
IC4116
IC4111
IC4115
IC4112
IC4118
IC4117
IC4120
IC4121
IC4122
IC4123
IC4124
IC4125
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IC4128
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IC4146
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IC4150
IC4151
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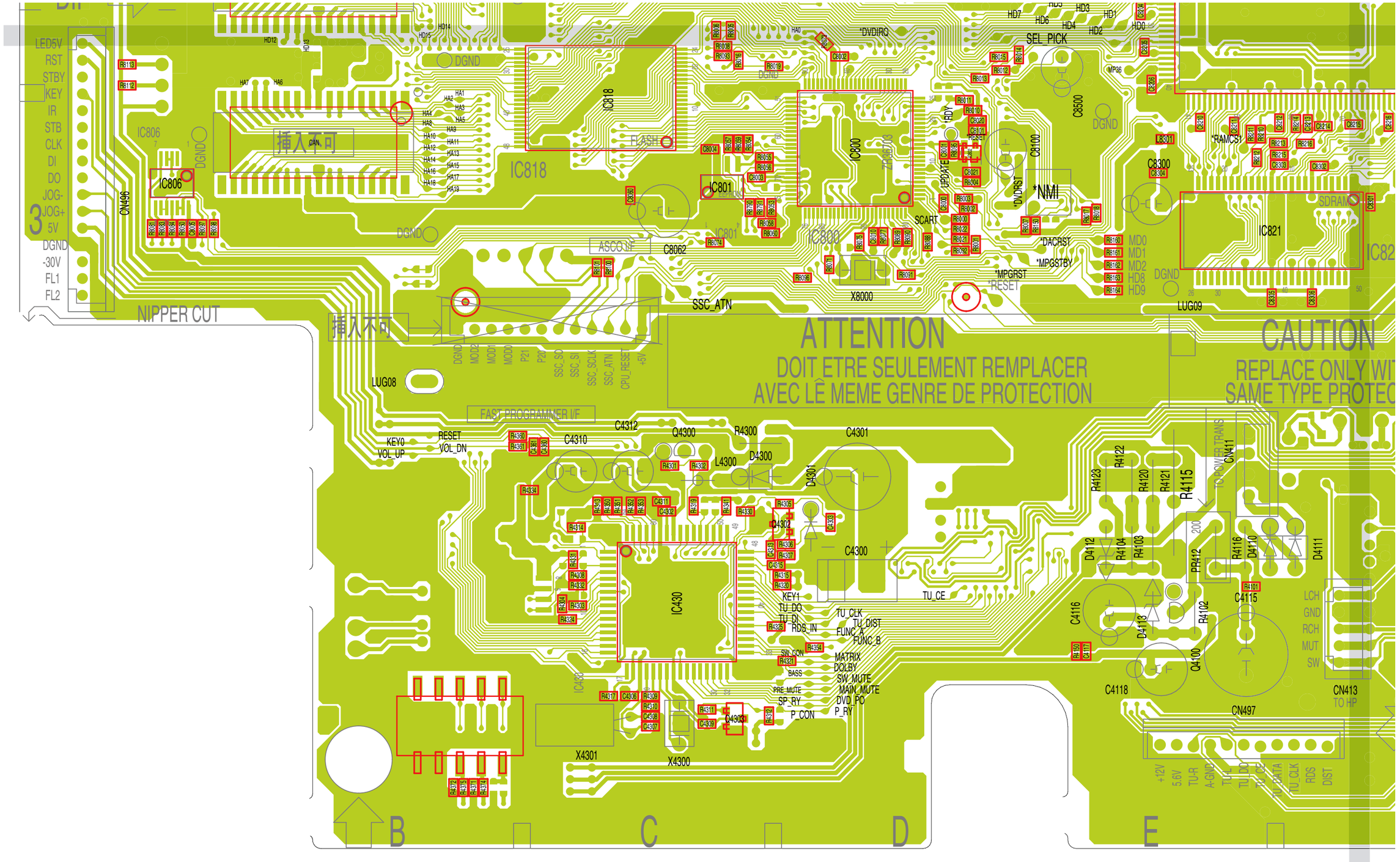
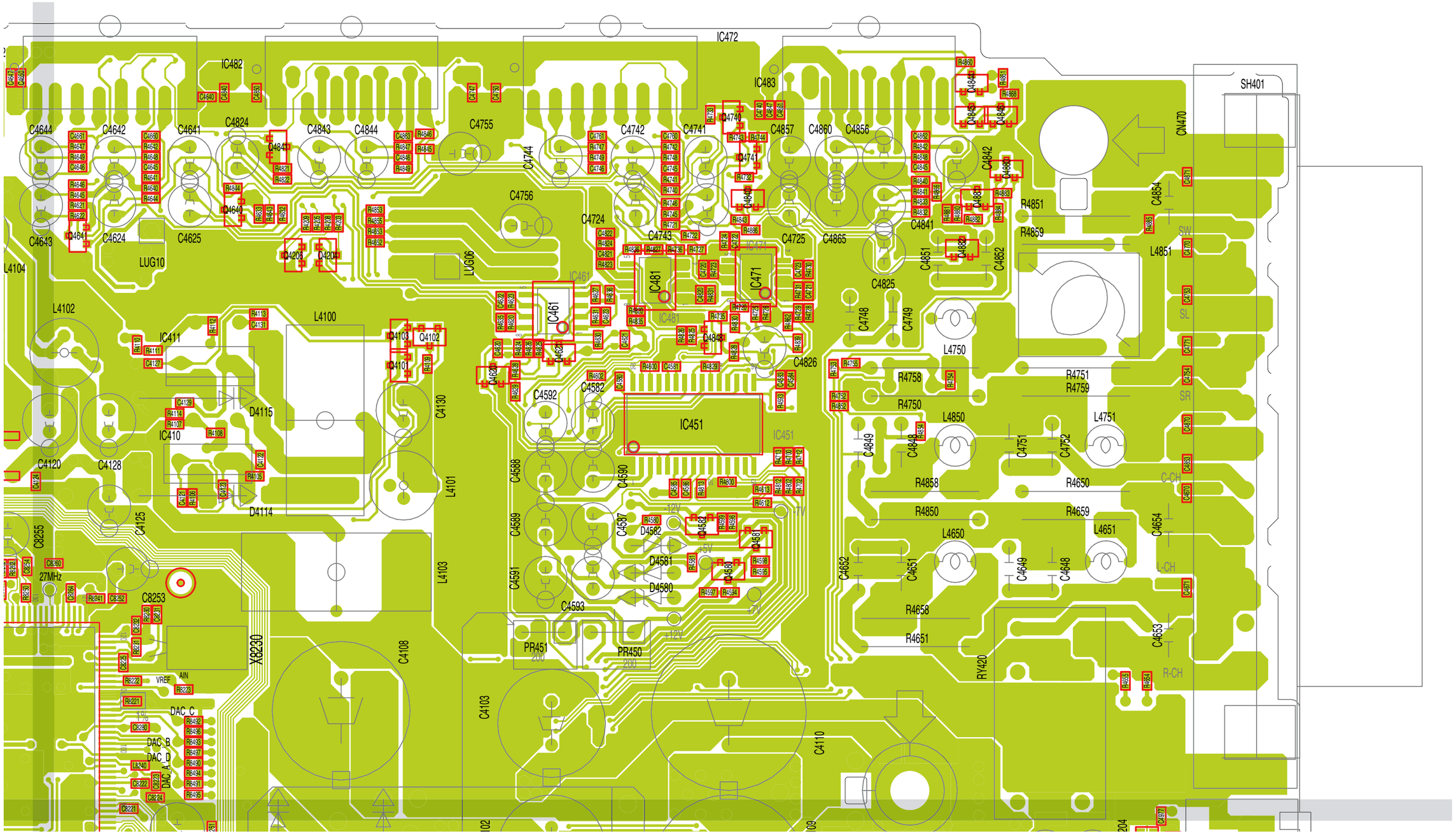
IC4156
IC4157
IC4158
IC4159

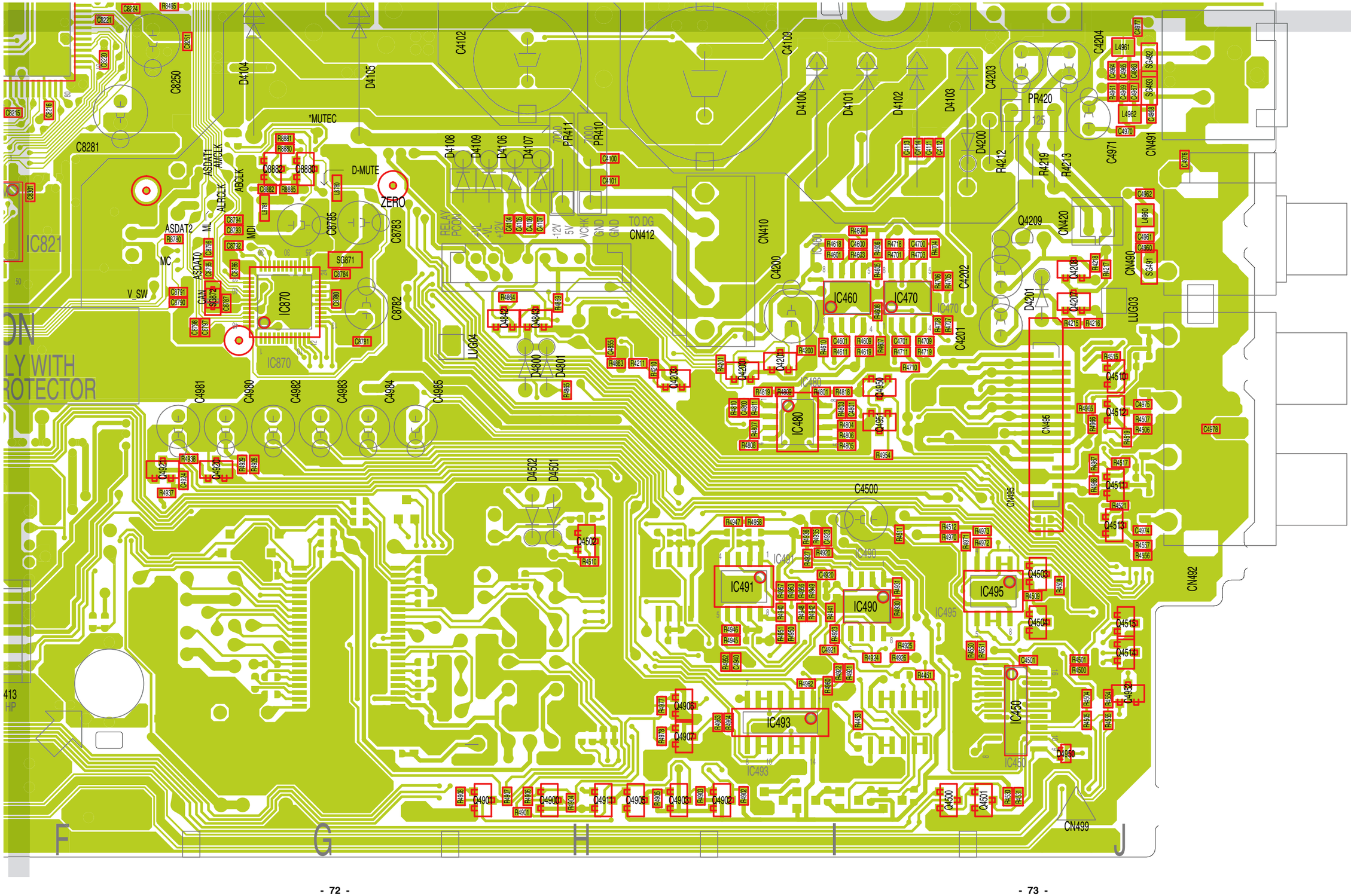
WIRING DIAGRAM (MAIN,AMP-DVD A SIDE for XE,UK BOTTOM LEFT)

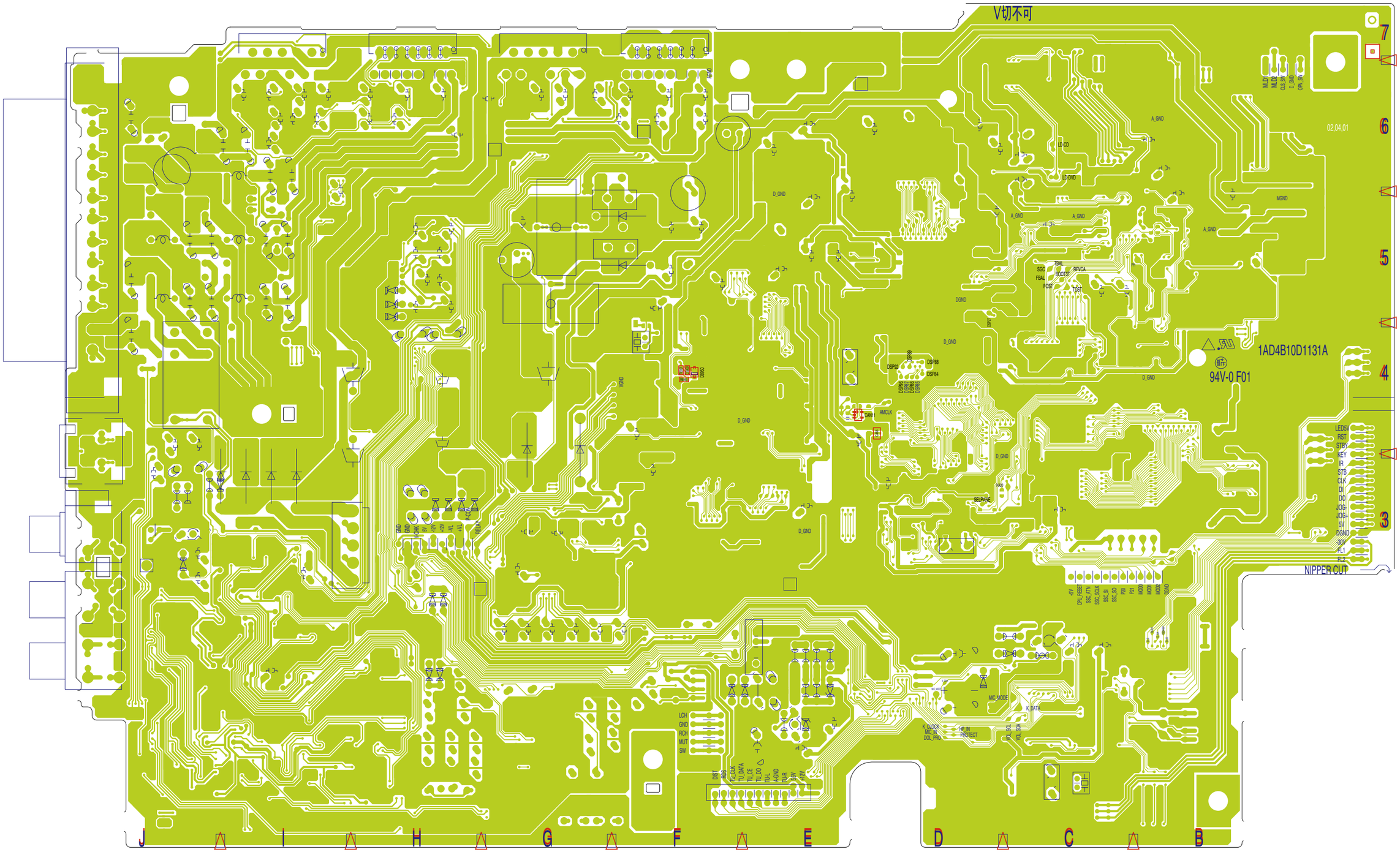


WIRING DIAGRAM (MAIN,AMP-DVD A SIDE for XE,UK TOP RIGHT)



WIRING DIAGRAM (MAIN,AMP-DVD A SIDE for XE,UK BOTTOM RIGHT)




V切不可
1AD4B10D1131A
94V-0 F01
02.04.01
NIPPER CUT
7
6
5
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J
I
H
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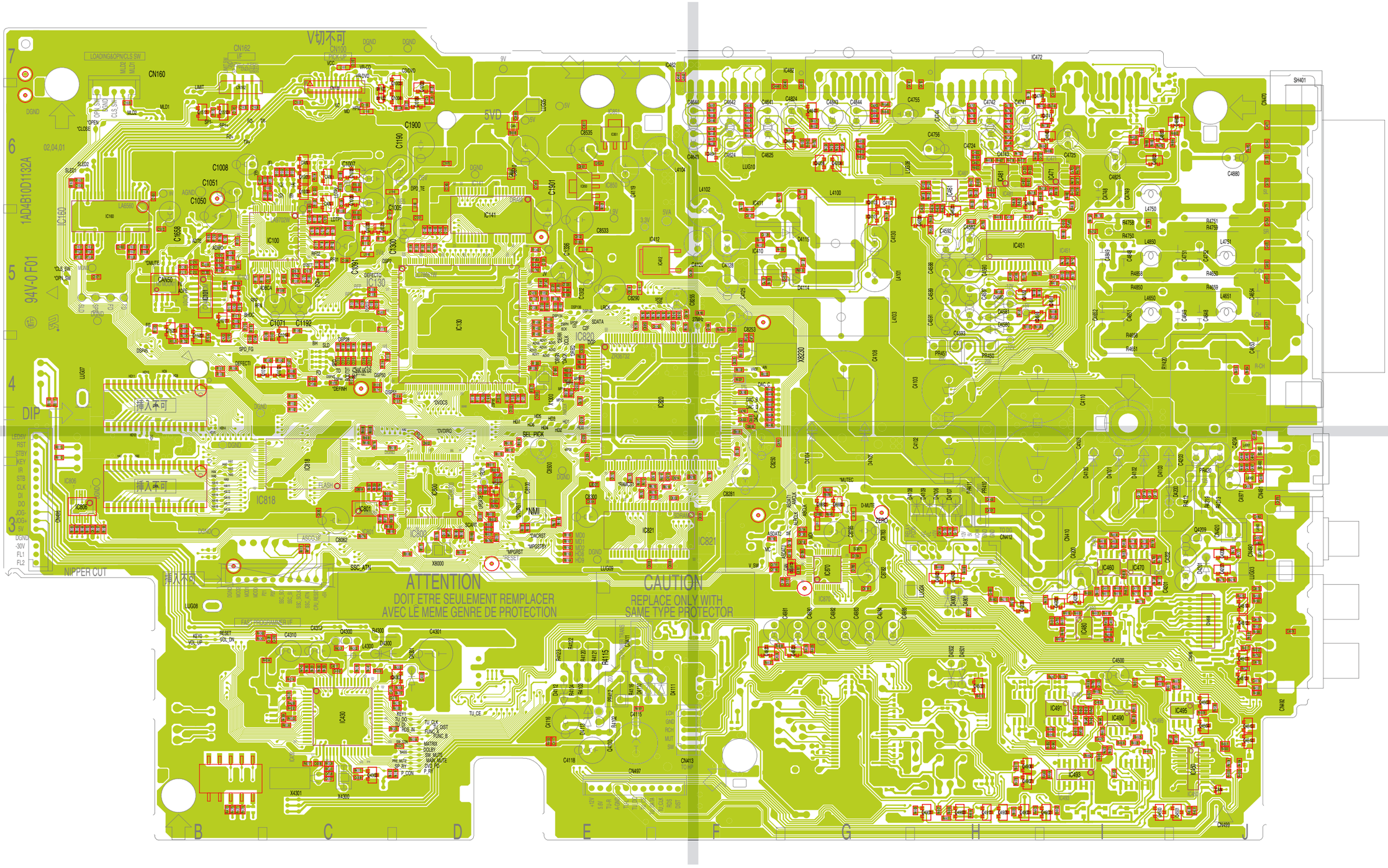
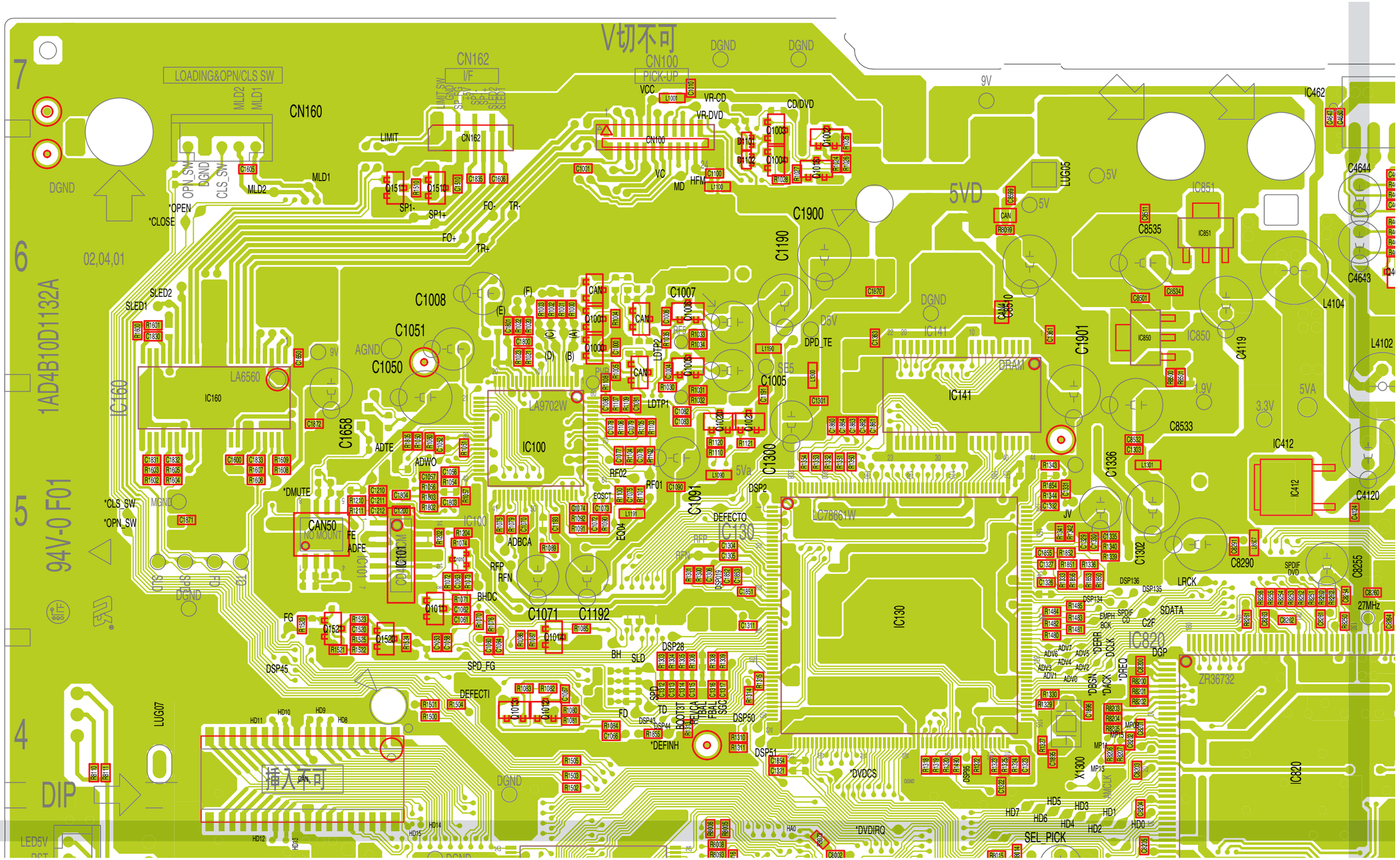
C
B

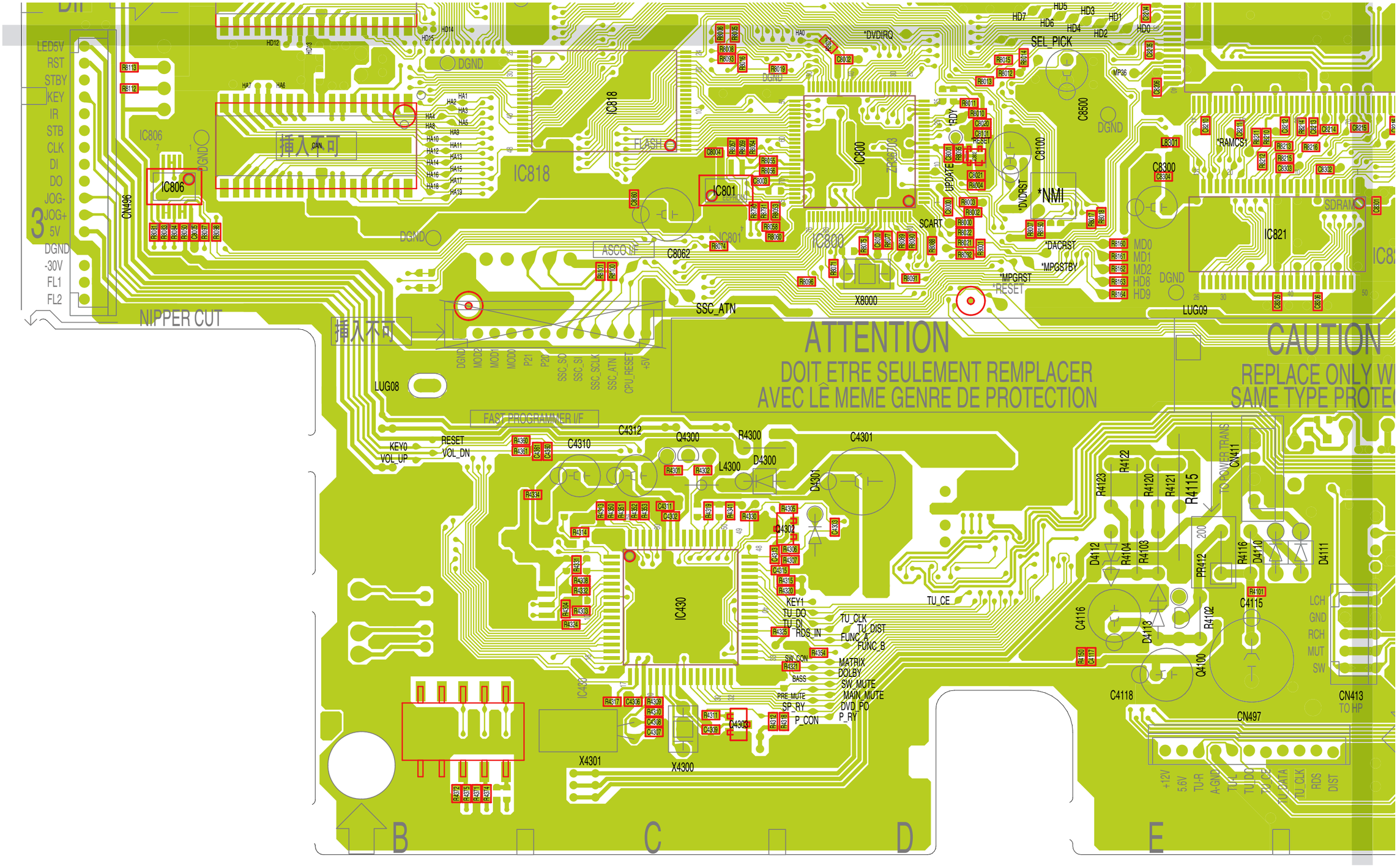
WIRING DIAGRAM (MAIN,AMP-DVD A SIDE for US)



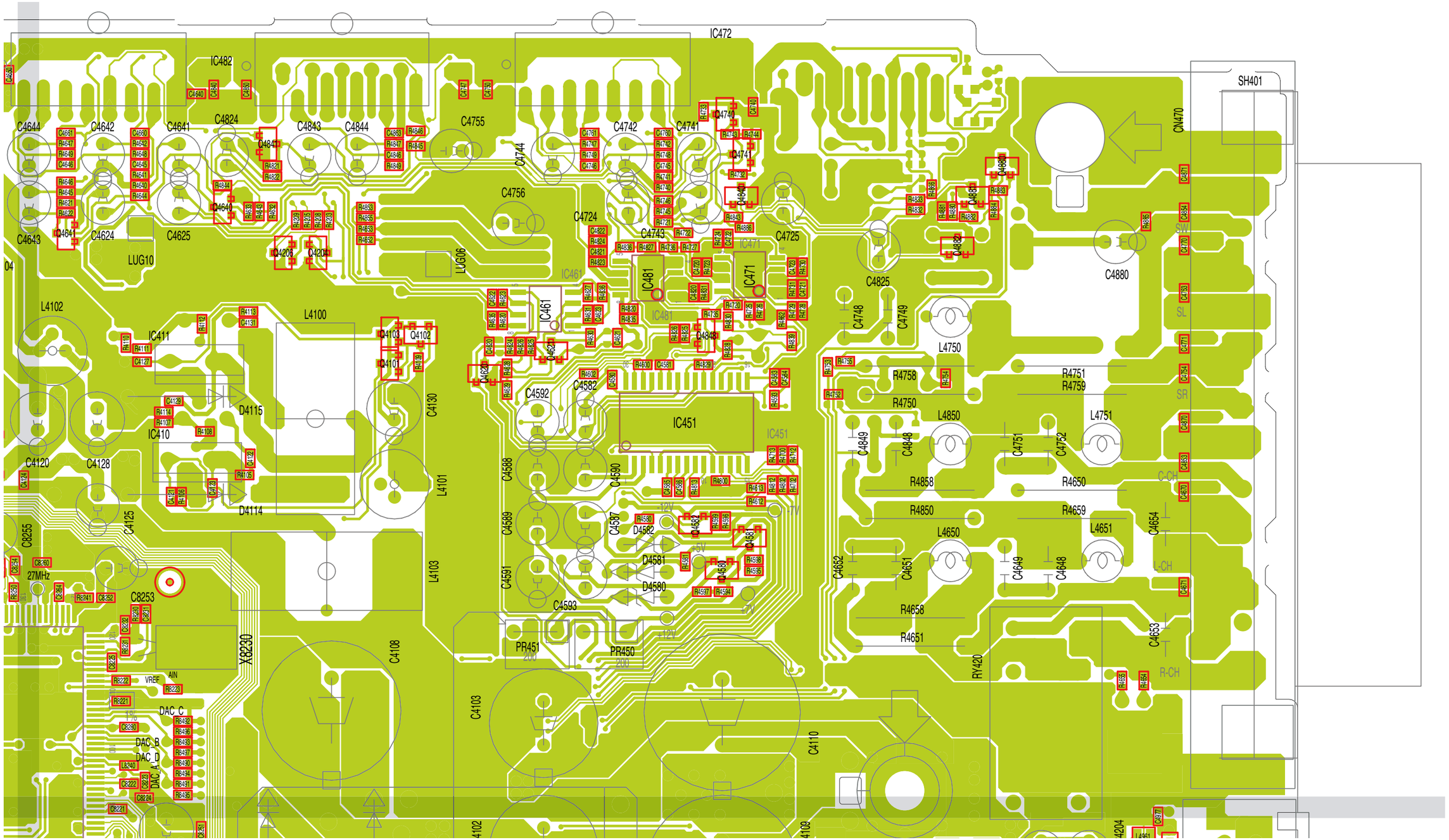
WIRING DIAGRAM (MAIN,AMP-DVD A SIDE for US TOP LEFT)



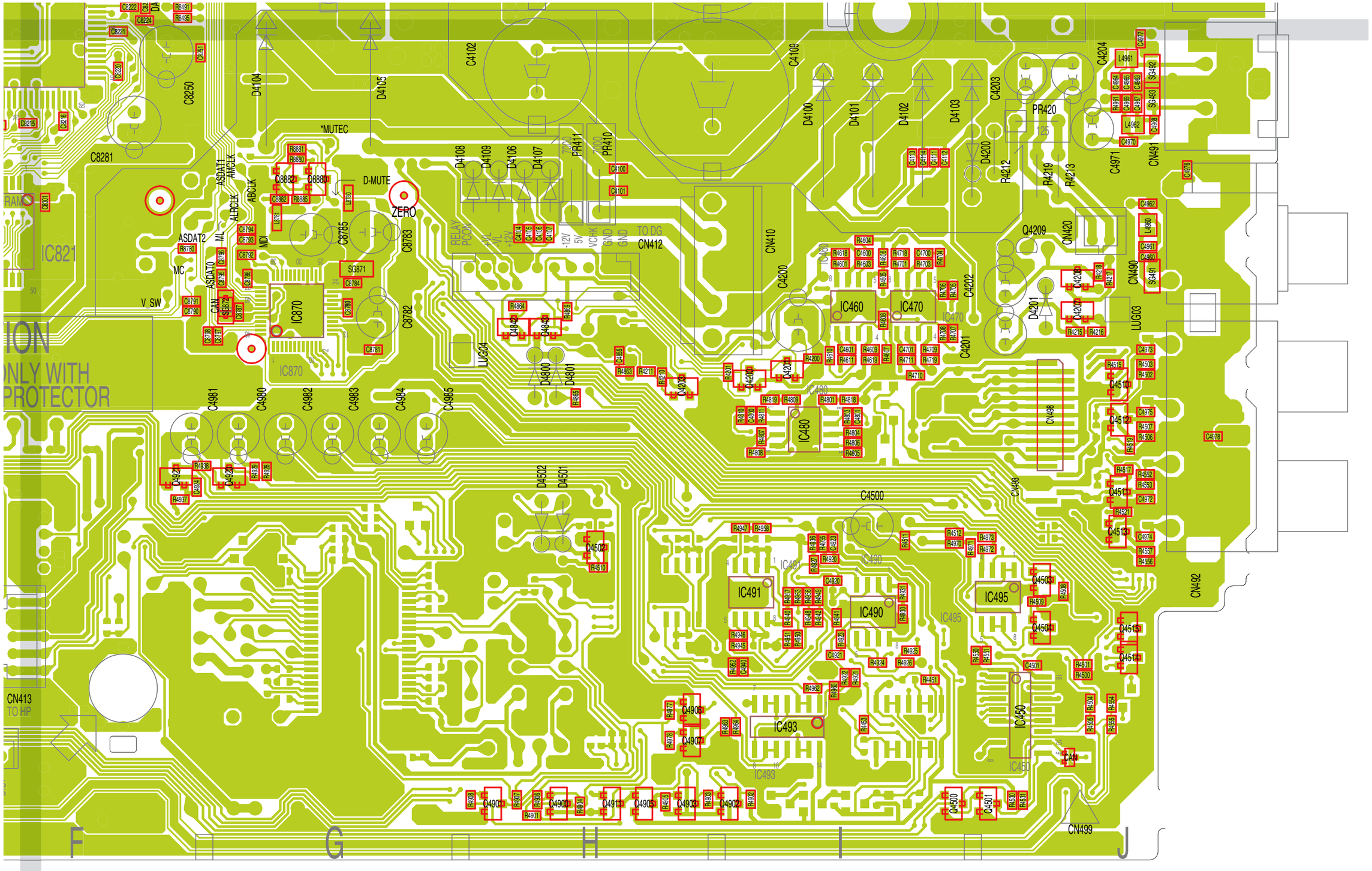
WIRING DIAGRAM (MAIN,AMP-DVD A SIDE for US BOTTOM LEFT)



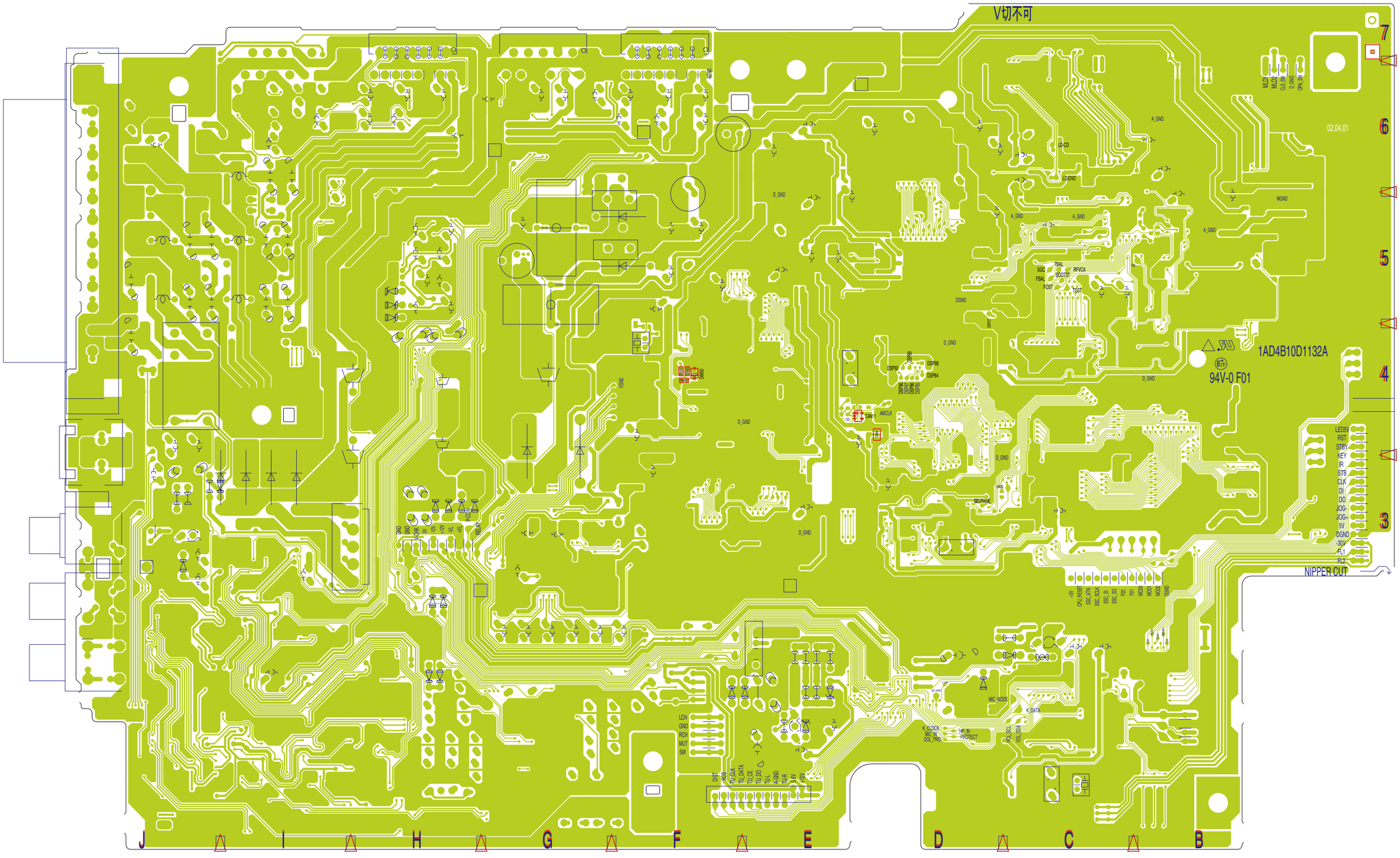
WIRING DIAGRAM (MAIN,AMP-DVD A SIDE for US TOP RIGHT)



WIRING DIAGRAM (MAIN,AMP-DVD A SIDE for US BOTTOM RIGHT)



WIRING DIAGRAM (MAIN,AMP-DVD B SIDE for US)



SPECIFICATIONS

Amplifier

Main amplifier
- Stereo mode
  - 20 W(730/CA),26W(750/US,CA,XE) x 2
  - (at 8 ohms, 10% distortion)
- Dolby Digital mode
  - 20 W(730/CA),26W(750/US,CA,XE) x 2
  - (at 8 ohms, 10% distortion, with Centre/Surround/Subwoofer amplifier off)

Centre amplifier
- 20 W(730/CA),26W(750/US,CA,XE)
- (at 8 ohms, 10% distortion, with Main/Surround/Subwoofer amplifier off)

Surround amplifier
- 20 W(730/CA),26W(750/US,CA,XE) x 2
- (at 8 ohms, 10% distortion, with Main/Centre/Subwoofer amplifier off)

Subwoofer amplifier
- 50 W(XE),50W(CA,UK)
- (at 4 ohms, 10% distortion, with Main/Centre/Surround amplifier off)
- US is Active Subwoofer.

Input:
- VIDEO (AUDIO) IN 1: 500 mV/50 kΩ(US,CA)
- VIDEO (AUDIO) IN 2: 500 mV/50 kΩ(US,CA)

Input/Output:
- AV EURO/TV (AUDIO) IN (RGB OUT): For Euro AV lead(XE.UK)

Outputs:
- SPEAKERS:
  - FRONT (L/R): 8 Ω
  - CENTER: 8 Ω
  - SURROUND (L/R): 8 Ω
  - SUBWOOFER: 4 Ω (Except US)
  - SUBWOOFER: 1K Ω (US)
- MONITOR OUT:
  - S-VIDEO:(XE,UK)
    - Y: 1.0 Vp-p (75 Ω)
    - C: 0.286 Vp-p (75 Ω) NTSC, 0.3 Vp-p (75 Ω) PAL
  - COMPONENT VIDEO OUTPUT: (US,CA)
    - Y: 1.0 Vp-p (75 Ω)
    - C_B: 0.7 Vp-p (75 Ω) , C_R: 0.7 Vp-p (75 Ω)
  - VIDEO: 1.0 Vp-p (75 Ω)

DVD Player

Type:
- DVD video player

Playback standard:
- PAL or NTSC(XE,UK)
- NTSC color (US,CA)

Laser:
- Semiconductor laser, wavelength: 650/790 nm
- Laser output (Continuous wave max.):
  - 1 mW (DVD)
  - 0.5 mW (CD)

Signal to noise ratio:
- More than 105 dB

Harmonic distortion
- 0.003 %

Wow and flutter:
- Below measurable level

Tuner

Reception frequency:
- FM: 87.5 - 108 MHz(XE,UK)
  - : 87.9 - 107.9 MHz(US,CA)
- AM: 522 - 1,611 kHz(XE,UK)
  - : 520 - 1,710 kHz(US,CA)

General

Power requirements:
- AC 230 V, 50 Hz(XE,UK)
- AC 120 V, 60 Hz(US,CA)

Power consumption:
- 120 W(XE,UK,CA)
- 110 W(US)
- 1.8 W (standby mode)(UK,XE only)

Dimensions:
- 435(W) x 75(H) x 375(D) mm

Weight:
- 6.4 kg

Speaker system

Front left, Front right, Centre, Surround left and Surround right speakers (SX-TS750S(XE,UK,CA),STM-8501S(US)), magnetic shield)

Unit used:
- 8 cm cone type, full range

Maximum power handling capacity:
- 40 W (peak)(XE,UK,CA)
- 60 W (peak)(US)

Nominal impedance:
- 8 Ω

Dimensions:
- 125(W) x 105(H) x 112(D) mm(XE,UK,CA)
- 150(W) x 110(H) x 115(D) mm(US)

Weight:
- 0.72 kg/speaker

Subwoofer (SX-TS750W)(XE,UK,CA)

Unit used:
- 13 cm cone type

Maximum power handling capacity:
- 80 W (peak)

Nominal impedance:
- 4 Ω

Dimensions:
- 160(W) x 415(H) x 310(D) mm

Weight:
- 4.9 kg

Active Subwoofer (STM-T750W)(US)

AUDIO INPUT:
- 0.75 V/15k Ω

Power requirements:
- AC 120V , 60Hz

Power consumption:
- 125 Watts

Dimensions:
- 160(W) x 415(H) x 310(D) mm

Weight:
- 7 kg

Specifications subject to change without notice.

DVD MECHANISM REPLACEMENT

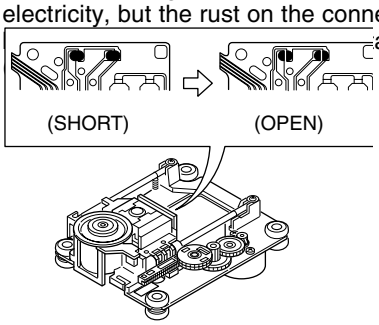
1. Cautionary instructions in handling the assy
(Safety instructions)
Optical pickup
The laser beam used in the pickup is classified as "class 2". Exposing your eyes or skin to the beam is harmful. Take care not to do so.

(Caution against static electricity and leakage voltage)
Ground securely the work tables, tools, fixtures, soldering irons (including those made of ceramic) and measuring instruments used in the production lines and inspection departments that handle loaders. The workers shall also be grounded.

(Cautionary instructions in handling)
Do not touch the object lens when handling a loader, or the lens will be stained, resulting in inadequate playability.
There is no power supply protection circuit provided for this product or adjustment/inspection device. Short-circuiting may lead to fire or damage.
Take care so as to protect from exposure to water, the entry of metallic pieces or dew condensation.
In particular, a strong magnet adjacent to the pickup will not only get inoperative but can damage the pickup if a small metallic piece, such as a screw or swarm, enters.
The loader edge can cause injury if inadvertently handled.
Do not touch a rotating disk, or injury may result.

This product is a precision device. Handle carefully.
A shock or dropping will cause misalignment or destruction. If it should occur, refer to clause 2.
This product is so designed as to endure an initial shock equivalent to a drop from a height of approx. 90 cm under the packed condition. After the initial shock, the resistivity will still remain at a level of 50 to 60 G, but the mechanical robustness will weaken.
Do not place in a dusty location.
The entry and deposition of dirt into or on the pickup lens or moving section will cause malfunction or degradation.

(Connectors)
Do not connect or disconnect while power is on.
Connecting or disconnecting signal wires or the main power cord when the power is on may destruct the unit or fixture.
When connecting, push all the way in securely.
An insufficient insertion may cause a bad contact, leading to an erroneous operation.
Do not connect or disconnect roughly by an excessively strong force, or a broken wire or bad contact may result.
Semiconductors are connected. Do not touch connector terminals directly.
If the worker is grounded, there is nothing to worry about static electricity, but the rust on the connector terminal surface caused act.



Before disconnecting FFC cable, make it "SHORT" as shown left.
After connecting FFC cable,make it "OPEN" as shownleft.

(Power source)
The power source need be good in quality (free from instantaneous interruptions or noises).
A low quality power source may well cause malfunction.

(Storage)
Do not place or store in a dusty place or a place where dew condensation is possible.
The entry and deposition of dirt or dust into or on the pickup lens or moving section will cause malfunction or degradation.
Also, dew condensation causes rust; the rust penetrate into the precision part of a pickup, causing malfunction, or degrading the optical quality of the internal lens and reflector, which also leads to malfunction.

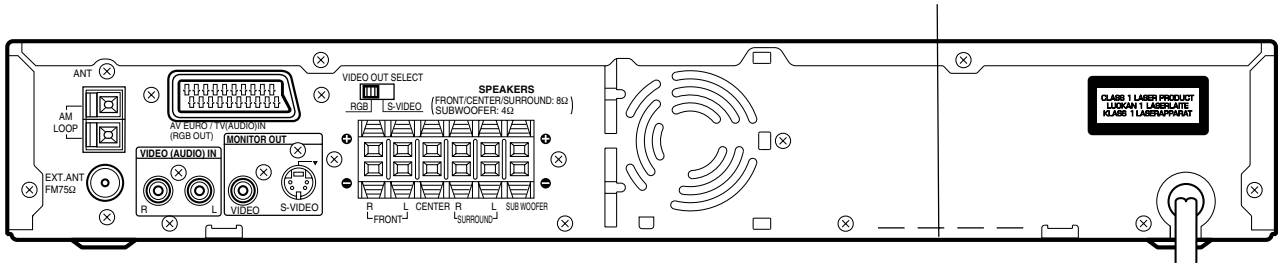
LASER BEAM SAFETY PRECAUTION

- Pick-up that emits a laser beam is used in this CD player section.

CAUTION :
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE

LASER OUTPUT ..... 0.6 mW Max. (CW)
WAVELENGTH ..... 790 nm

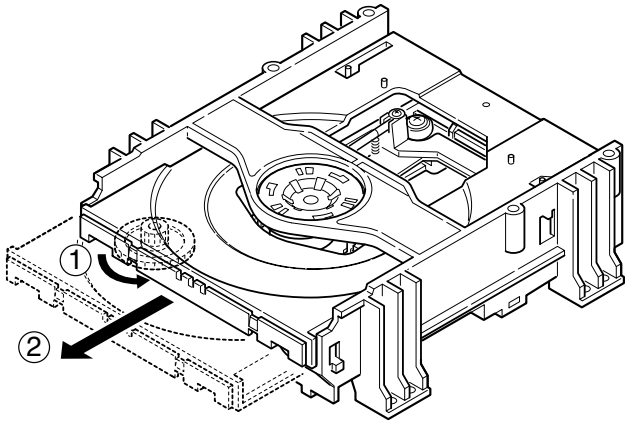
CAUTION – INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.
ADVARSEL – USYNLIG LASER STRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION, UNDGÅ UDS ÆTTELSE FOR STRÅLING.
VARNING – OSYNLIG LASER STRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRR ÄR URKOPPLAD. STRÅLEN ÄR FARLIG.
VORSICHT – UNSICHTBARE LASERSTRAHLUNG TRITT AUS, WENN DECKEL GEÖFFNET UND WENN SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT IST. NICHT, DEM STRAHL AUSSETZEN.
VARO – AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.



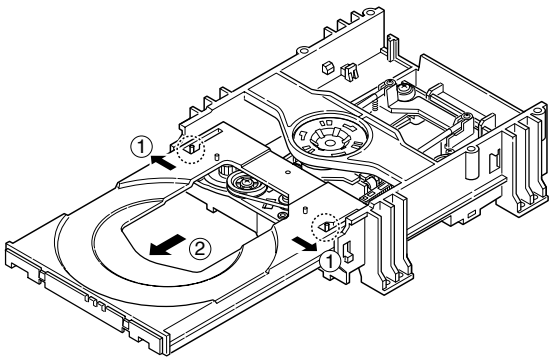
Illustrator is UK,XE version.

MECHANISM REPLACEMENT

1. How to remove the tray.

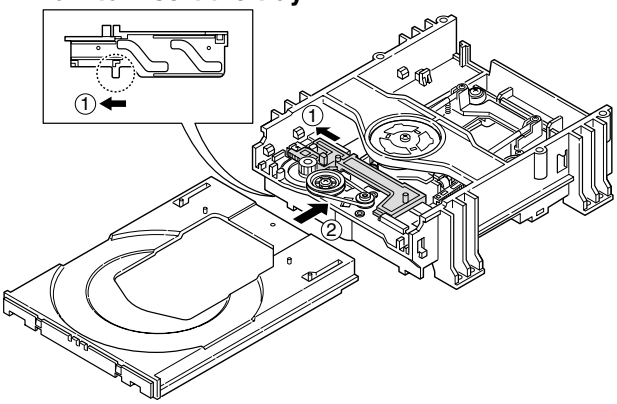


Rotate the ① 1 gear.
Move forward the ② 2 tray.



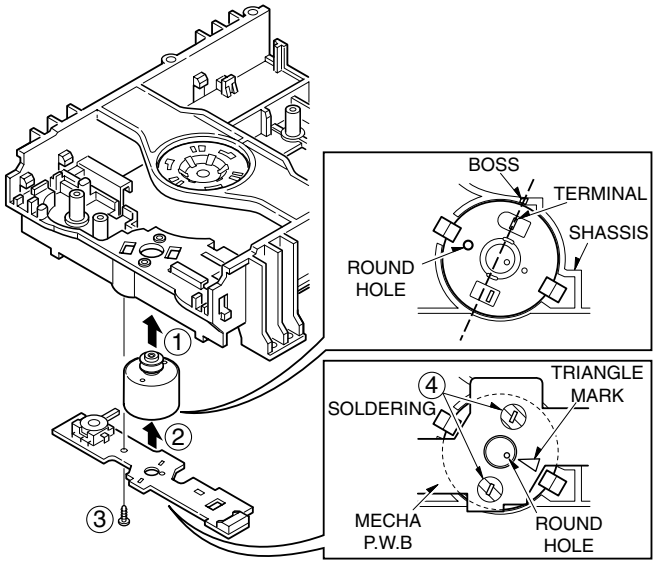
Move both the right and left ① 1 tray pins to the ends.
Remove the ② 2 tray.

2. How to insert the tray.



Move the ① 1 slide to the left end.
Insert the ② 2 tray.

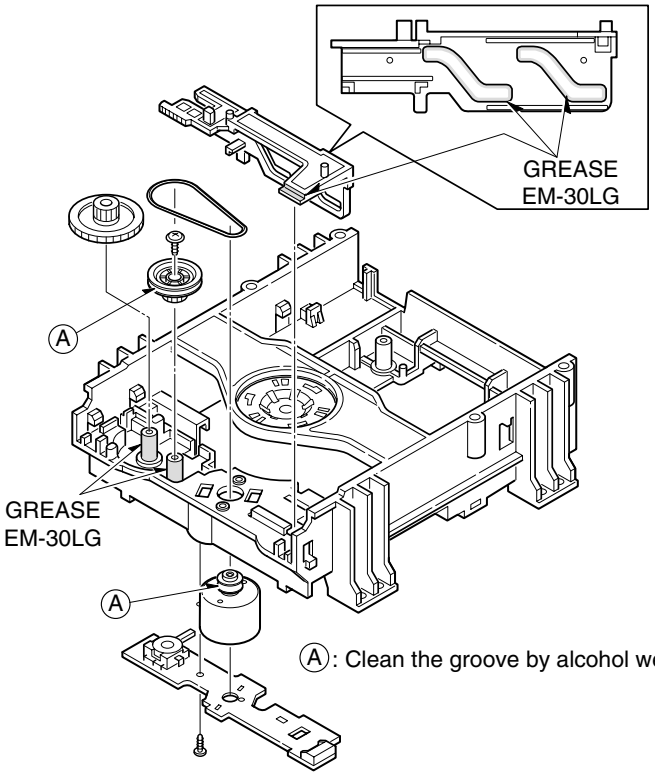
3. How to install the motor.



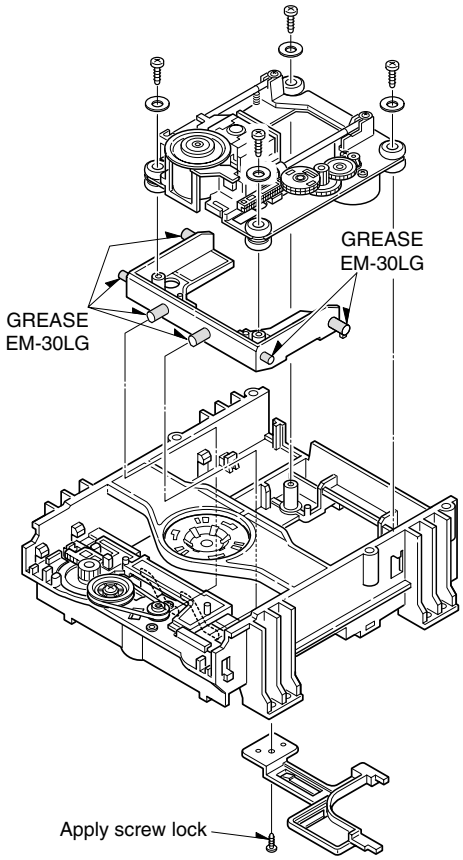
① Adjust the motor terminal to boss in the chassis.
② Adjust the round hole of the motor to the triangle mark of P.W.B,and solder it.

MECHANISM REPLACEMENT

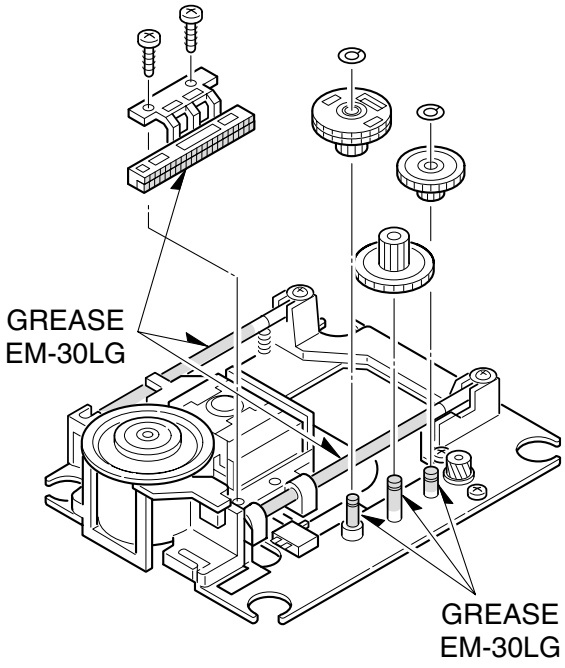
4. Base mechanism mounting parts.



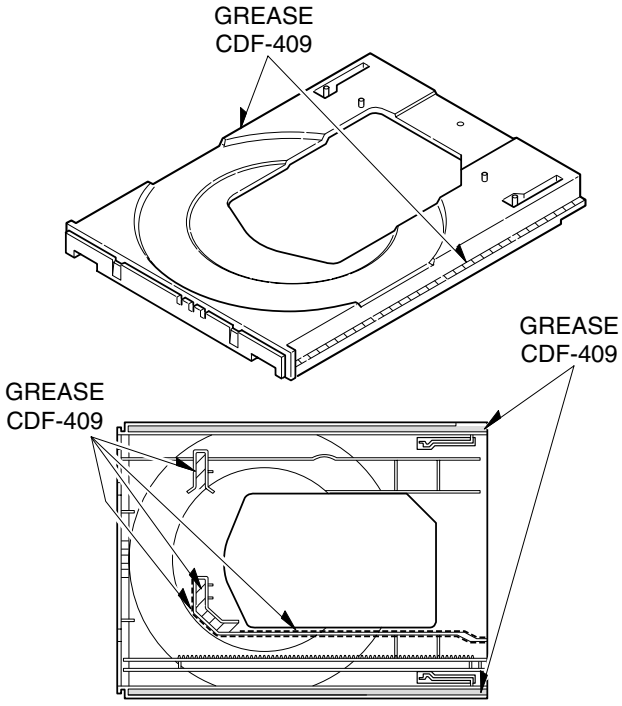
Ⓐ: Clean the groove by alcohol well.



5. Base mechanism parts.

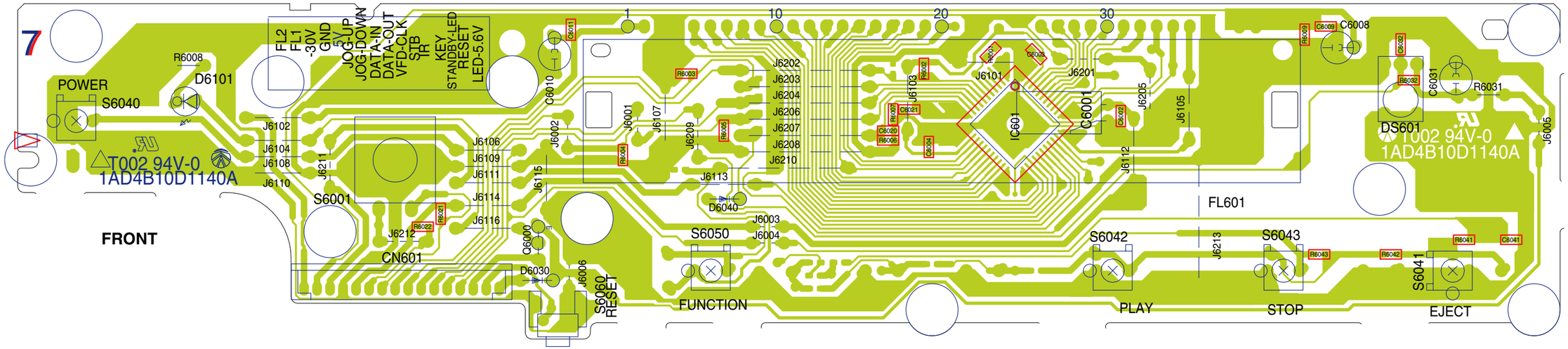


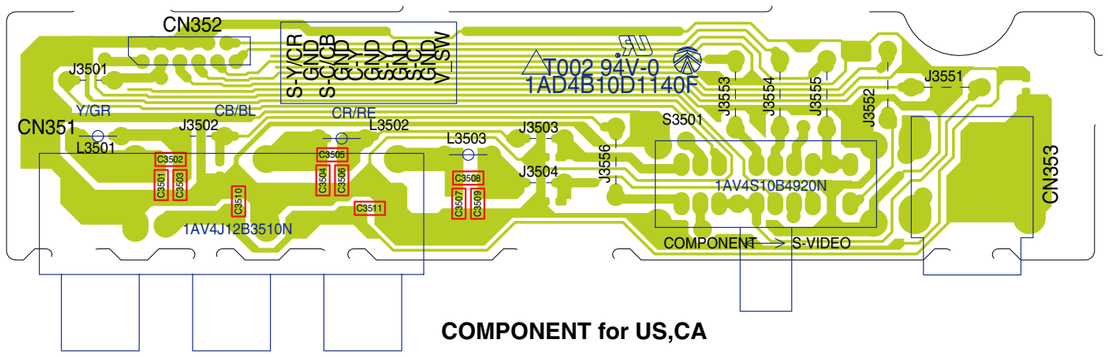
6. Tray parts.



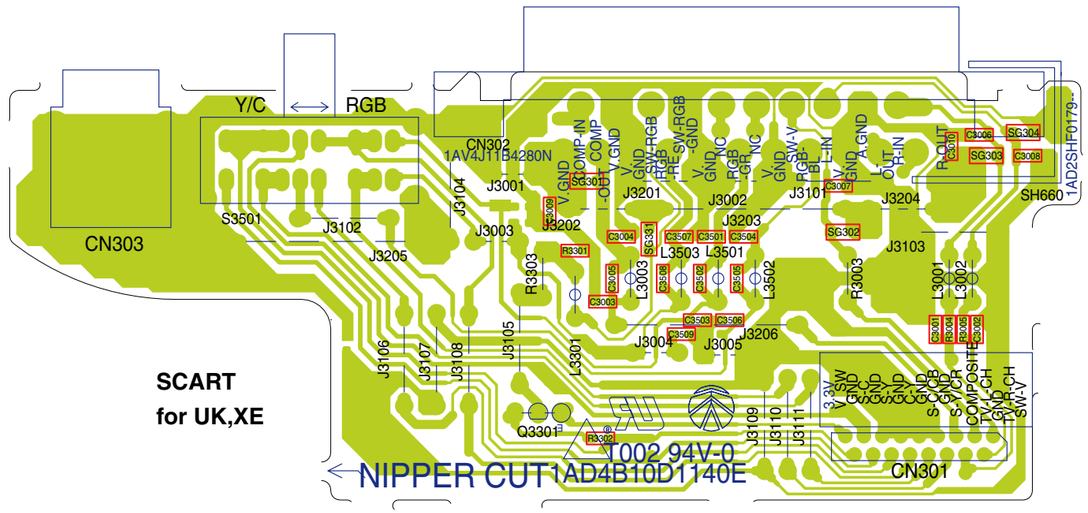
Do not remove the pick-up from base mechanism because of adjustment difficulty.

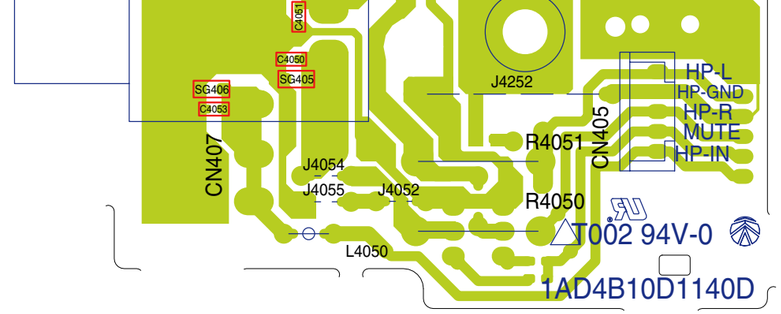
WIRING DIAGRAM (FRONT , COMPONENT , SCART , HEADPHONE and MECHA SW)



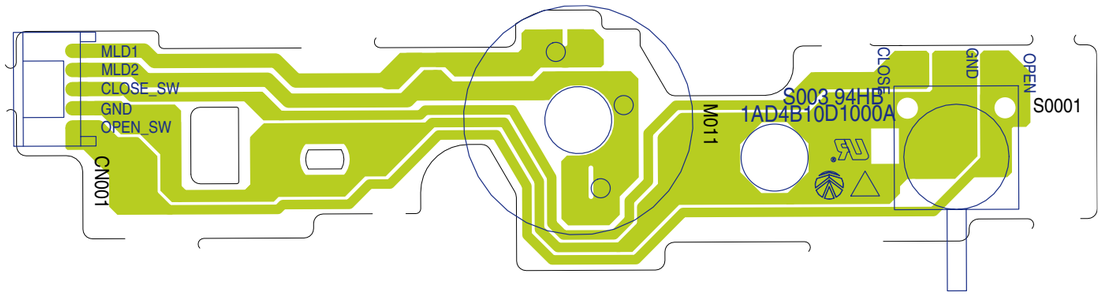


COMPONENT for US,CA



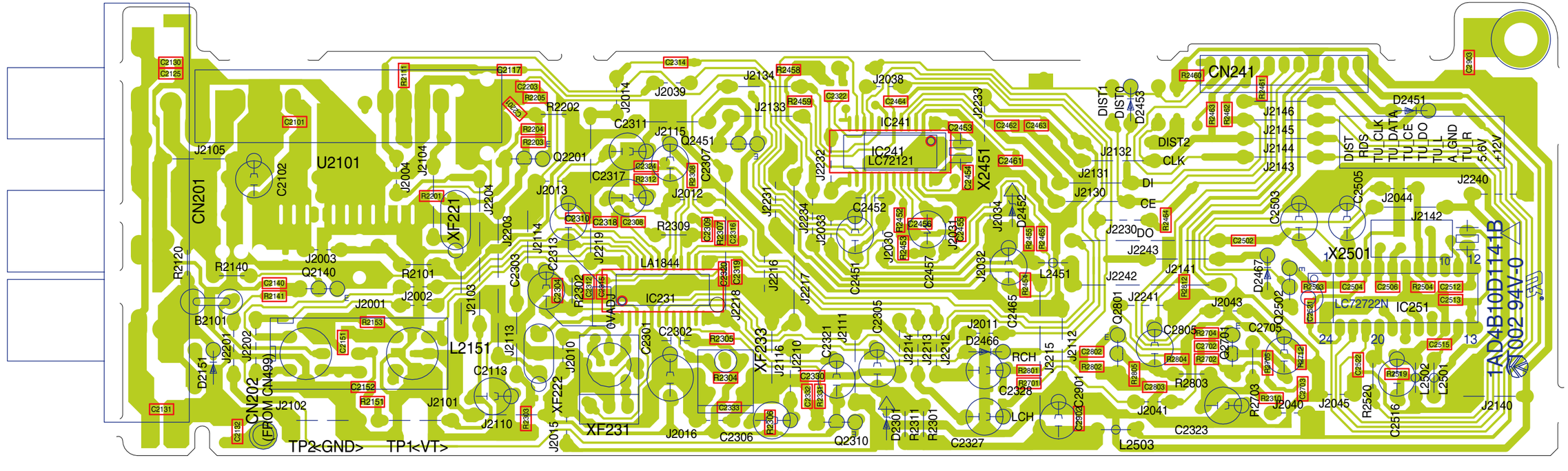


HEADPHONE

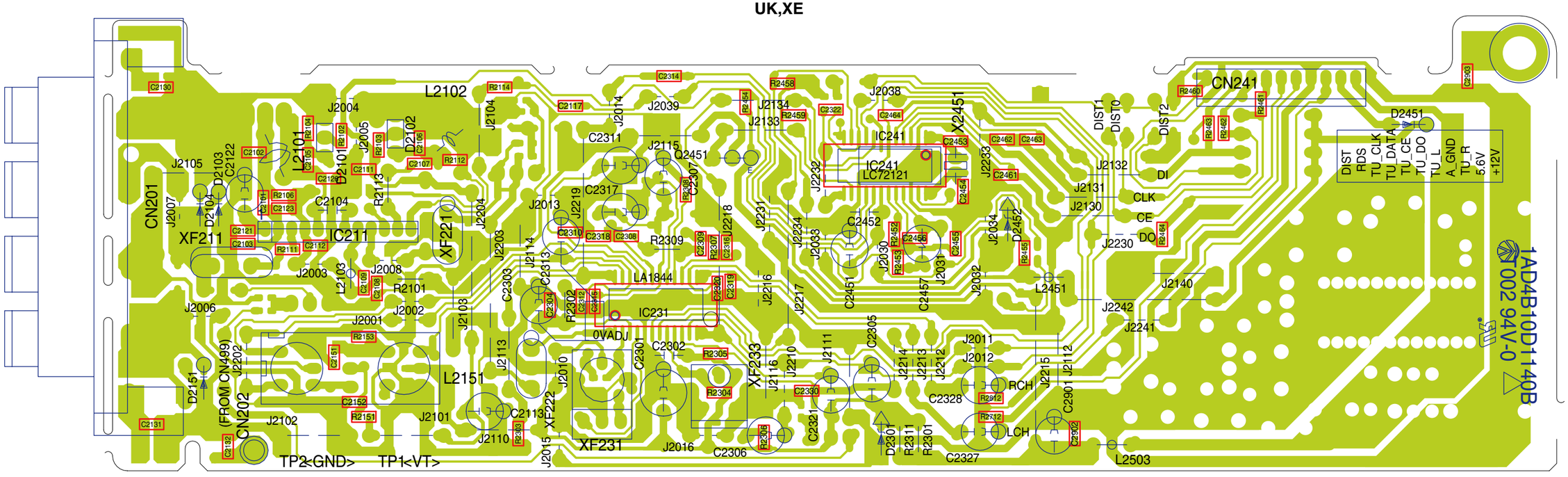


MECHA-SW

WIRING DIAGRAM (TUNER)

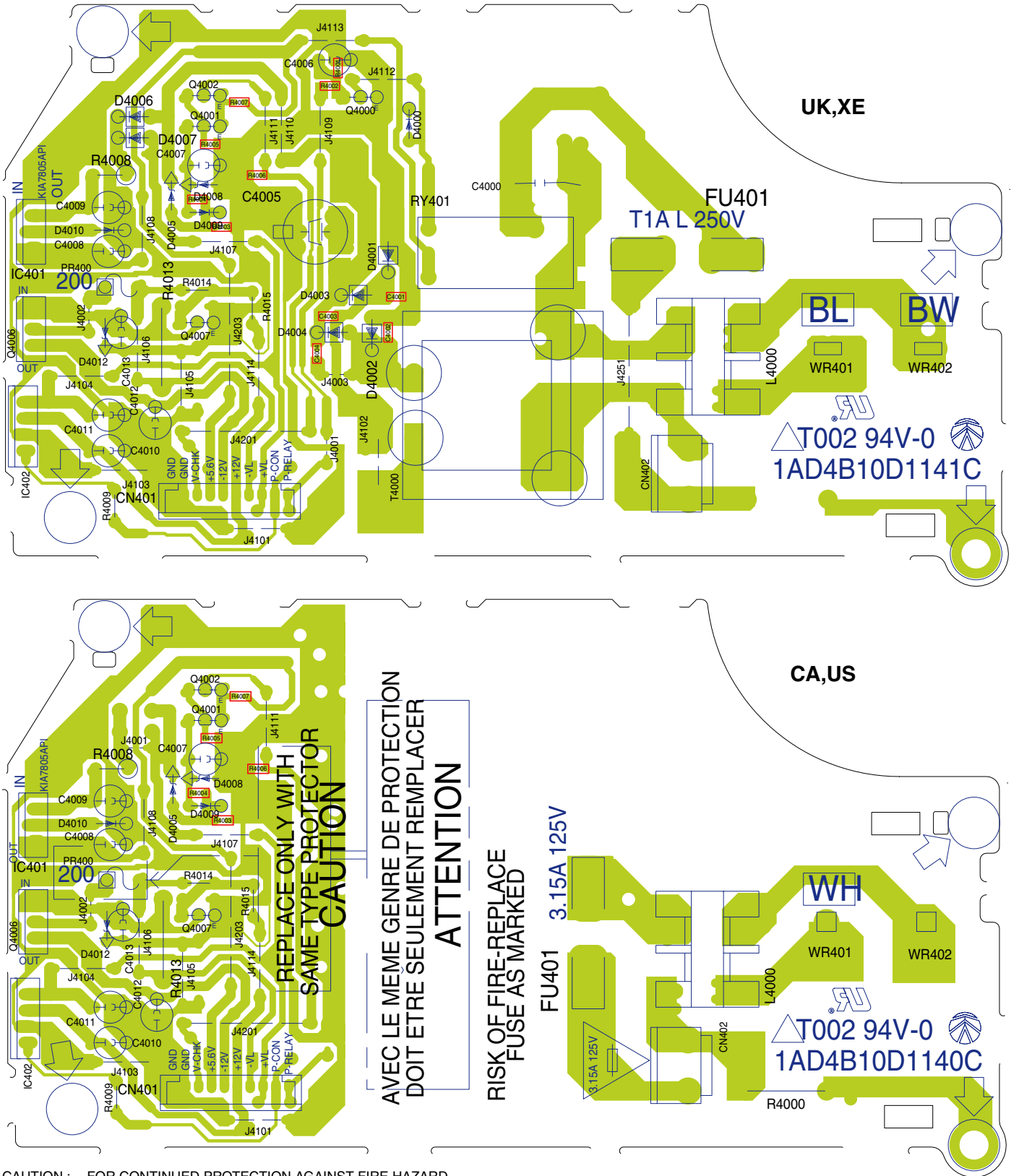


UK,XE



CA,US

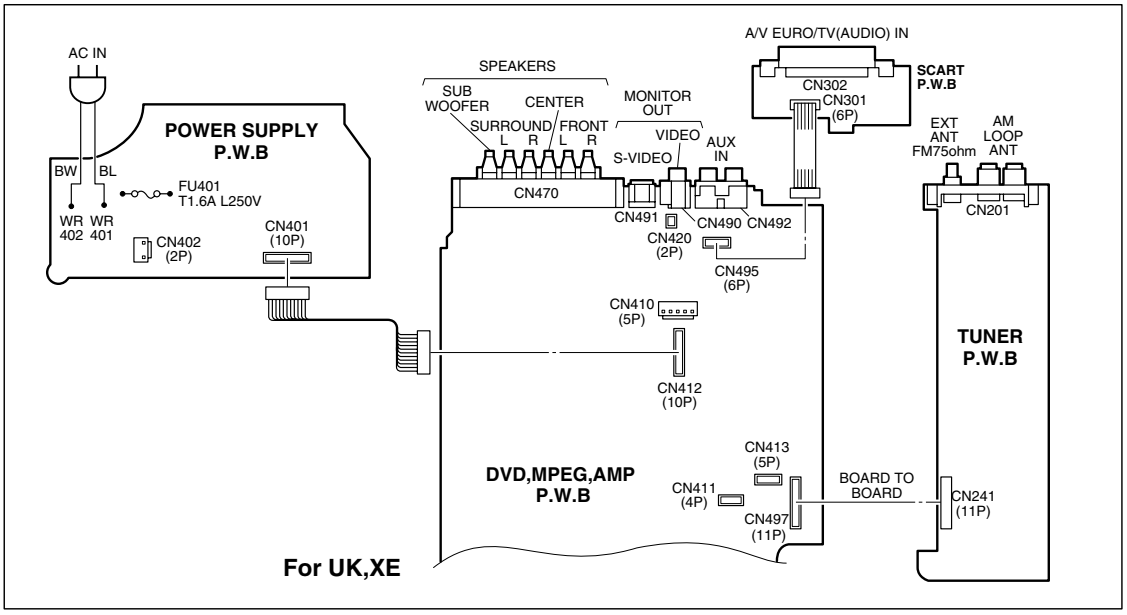
WIRING DIAGRAM (POWER SUPPLY)

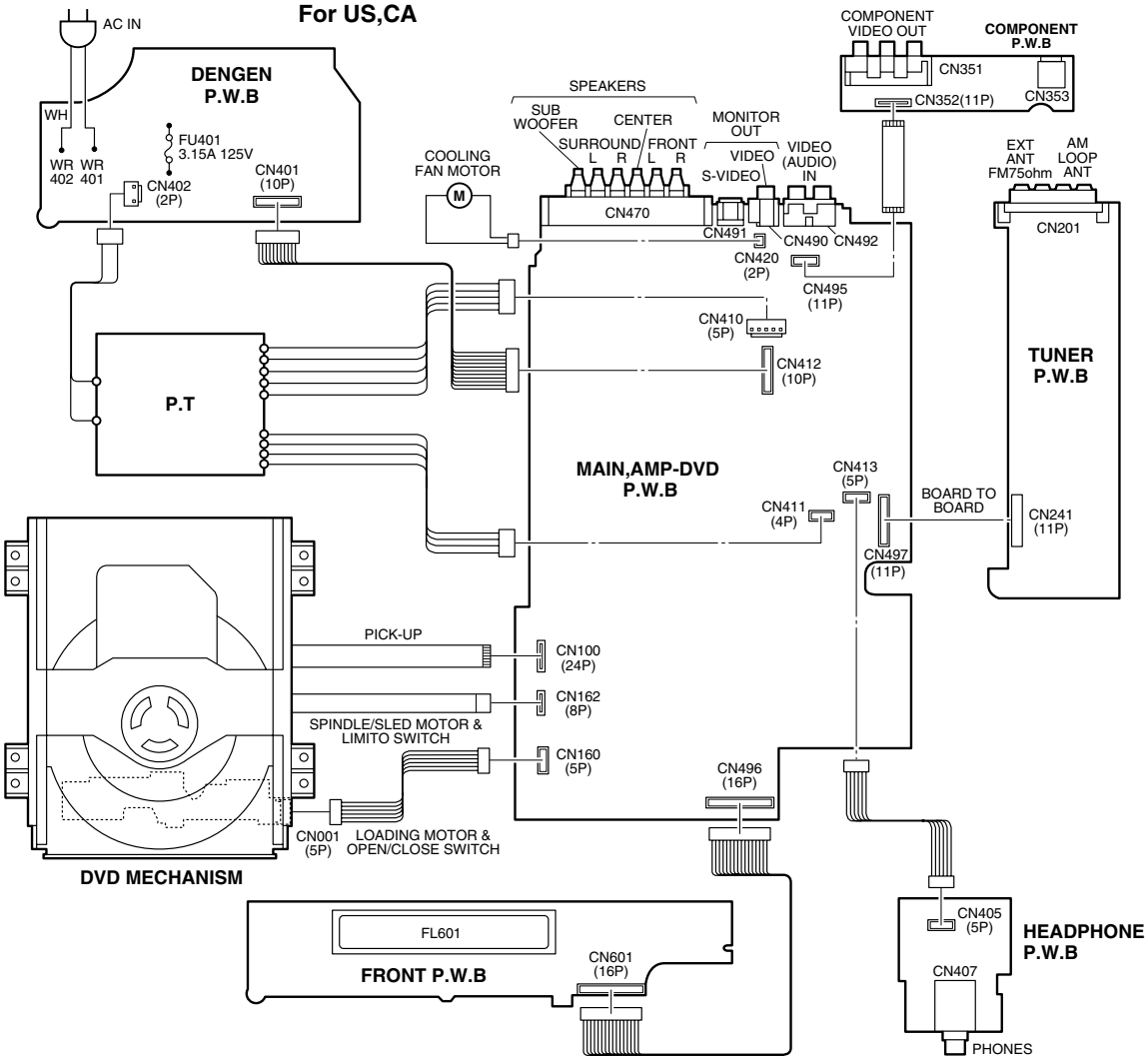


CAUTION : FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE FUSE
3.15A 125V (FU401) .

ATTENTION : POUR UNE PROTECTION CONTINUE LES RISOUES D'INCEIE
N'UTLISER QUE DES FUSIBLE DE MEME TYPE
3.15A 125V (FU401) .

WIRING CONNECTION





This is a basic wiring connection.

SANYO

SANYO Electric Co., Ltd.
OSAKA, JAPAN

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